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Written language skills of middle and high school students in an alternative program

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WRITTEN LANGUAGE SKILLS OF MIDDLE AND HIGH SCHOOL STUDENTS IN AN ALTERNATIVE PROGRAM

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DEDICATION

To my family

To the most loving and caring parents one can ask for, Nedime and Arif Sami Rende, my dearest sisters Hulya and Fulya who unconditionally love and support me, Serif, Filiz and Sedat for just being in my life, Ann Nese Nedime for bringing the greatest joy to our lives, and my one and only Cem for being very patient with me and keeping me going…

Thanks for never let me quit,

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TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

The purpose of this study was to determine the written language skills of middle and high school students who were attending alternative programs in Southern California. The participants of this study were 114 students who were identified and served under Delinquency Prevention Program (DPP) and 83 students who were identified and served under Court Ordered Probation (COP). The Test of Written Language -3 (TOWL-3) (Hammill & Larsen, 1996) was administered to the participants in order to obtain written language measures. In addition, this study investigated whether any relationships exists between written language skills, academic measures and selected demographic characteristics of the participants. The descriptive findings of this study indicated a descriptive profile of participants enrolled in alternative programs: a majority of the participants were males; Hispanics and a large number of them were English Language Learners. In addition, the majority of the participants in group DPP were new to the program while the number of the participants who were re-enrolled was higher in group COP. Although, the findings of this study revealed no significant difference among groups on written language measures the majority of the participants in both groups performed far below the norms for their age. A moderate association was found between participants' written language and reading measures (r=.30) which was significant at 0.01 level and written language and math performance(r=40) at 0.05 level for participants in group DPP. Findings of multiple regression analysis revealed some gender, ethnicity, language designation, group (DPP or COP) influence on participants' written language and academic achievement measures.

CHAPTER 1

INTRODUCTION

Issues Related to Students At-Risk

The number of children who are poor, non-English speaking, with disabilities, culturally different, and raised in single-parent families is increasing in schools (Barr & Parrett, 2001, p. 5). Some of these characteristics and experiences may put children at –risk for academic failure and/or social maladjustment. Although various definitions of "at-risk" exist in the literature, one common characteristic of all is reported to be the presence of "a set of causal/behavioral dynamics that place the individual in danger of a negative future event" (Gross & Capuzzi, 1989, p.5).

Given that, this study sets to investigate the written language skills of students who are at-risk for behavioral disorders and /or delinquency. It includes a group of students who attend an alternative program, and identified and served as either under Delinquency Prevention Program or Court Ordered Probation. For the purpose of this study, at-risk has been defined as any condition that may impede positive behavioral and expected academic growth. The following section will present an overview of the prevalence of students at-risk for various behavioral and academic difficulties summarizing data from various sources.

Prevalence

Certainly children with identified disabilities are often at risk of delay in positive behavioral and academic growth. In the 22nd Annual Report to the Congress (2000), the number of students, ages 6 through 21 served under Part B of the Individuals with Disabilities Education Act (IDEA) was reported as 5.541.166 in 1998-99. This represented a 2.7 percent increase over

the previous year. Specific learning disabilities continued to be the most prevalent disability among students 6 through 21 (50.8 %); speech and language impairments (19.4%); mental retardation (11.0 %); and emotional disturbance (8.4%) were the next most common disabilities (U.S. Department of Education, 2000).

In addition to the identified disability groups, the prevalence of young children at- risk for or with behavioral disorders is increasing. The number of children identified as having conduct problems and temperament problems has also increased (U.S. Department of Education, 2000). Forness, Kavale, MacMillan, Asarnow, and Duncan (1996) reported that at least 6 percent of the children who are served in Head Start demonstrate significant behavioral concerns. Schubert and Gates (1990) estimated that one in four adolescents, about seven million youth, are seriously at risk of not making a successful transition from youth to adulthood while another seven million may be at moderate risk. Davis and McCaul (1990) further indicated that approximately one million youth per year leave school without completing their basic education, which is often necessary for employment. Hallahan (1992) stated that the identification and the prevalence of disabilities are increasing due to higher levels of poverty, substance abuse and lower levels of social supports.

Although many behavioral problems are reported to be present at early ages and develop over a period of time, these children are often not provided with services that address their behavioral needs for many years (Conroy & Davis, 2000; Del'Homme, Kasari, Forness, & Bagley, 1996). While schools often delay referrals for evaluation in order to avoid inappropriate labeling, students often fail to receive services until they are older. For example, only 17.4 percent of the children identified as "seriously emotionally disturbed" have been identified by

the age of 9, and less than 50 percent of these children have been identified by the age of 12 (Del'Homme et al., 1996). This appears to support the idea that systematic early intervention linked to identification may be lacking.

These data point to the need to further examine the factors related to children at risk for various disabilities. A related line of research may lead to a better understanding of risk factors which will improve early identification and preventive intervention strategies by schools and communities.

Etiology of At-Risk Students

There are a large number of children who are exposed to factors that may place them at risk for the development of behavioral problems. These factors have been summarized under various categories (Conroy & Davis, 2000; Barr & Parrett, 2001). Factors that place children at-risk will be addressed in two subcategories: Environmental (external) risk factors and developmental and/or disability related (internal) risk factors.

Environmental factors may include characteristics related to school (Hancock, Kaiser, Ezell, & Hester, 1998; Barr & Parrett, 2001) and home environment (Hancock et al.,1998; Clarke & Campbell, 1998; Barr & Parrett, 2001; Farrington, 1990) which include substance use in home setting, physical and sexual abuse (Carran, Nemerofsky, Rock, & Kerins, 1996; Hamburg ,1992; U.S. Department of Education, 2000), poverty (Pallas, Natriello, & McDill, 1989; Slavin & Madden, 1989), maternal health, having a poorly educated mother, absence of father, having a non English language background (Pallas et al., 1989), minority ethnic and racial background (Carran et al., 1996; Pallas et al., 1989; Hechinger, 1992; Johnson, 1998), and inadequate parenting skills (Kamps, Kravitis, Stolze, & Swaggart, 1999; Farrington, 1990).

Fujuira and Yamaki (2000) reported that disability risk was higher among children living in poverty (Farrington, 1990) and in single-parent households (Carran et al., 1996). Even if the direction of these relationships between poverty and prevalence of disability was not clear, they argue that it is certainly a source of concern.

Developmental and/or disability related factors include developmental delays in the areas of social, communication (Hancock et al., 1998), cognition and academic/school related individual behaviors (Slavin & Madden, 1989). Particularly, the risky behaviors are substance abuse, sexual activity, pregnancy, and disease; gang activities (Johnson, 1998); nutrition, and fitness; depression and suicide; delinquency and violence; and adolescent injury (Hamburg, 1992; U.S. Department of Education, 2000).

Characteristics related to school are reported to be teacher-student interactions (Kamps et al., 1999; Davis & McCaul, 1990), teacher attitude toward students at-risk (Barr & Parrett, 1989), peer- pressure (Akers, Marvin, Krohn, Lanza-Kaduce & Radosevich, 1979; Aseltine, 1995; Clarke & Campbell, 1998), attending school with a large number of poor students (Slavin & Madden, 1989), truancy (Carran et al., 1996), curricular variables (DePaepe, Shores, Jack, & Denny, 1996; Dunlap & Kern, 1993), and existing intervention practices such as expulsion, retention and pull-out programs (Barr & Parrett,1989). Students who are at risk and are members of minority groups are reported to be facing these issues at a higher degree (Hechinger, 1992; Pallas et al., 1989).

Young children identified as at- risk for the development of Emotional Behavioral Disorders (EBD) are reported to be experiencing a number of significantly different realities in

the classroom than non-at-risk peers: they were rejected by their teachers while the non at-risk students were not, and were perceived by their teachers as having significantly less ideal pupil attributes than their non at-risk peers. It was also indicated that they have spent significantly less time academically engaged than their non at-risk peers and received limited accommodations. Teacher feedback and statements were reported to be significantly more negative or neutral than their peers (Lago-Delello, 1998).

The academic and school related individual behaviors are achievement, behavioral problems and poor attendance (Slavin & Madden, 1989). Achievement plays an important role in the psychological well being of the students. For example, reading, by the end of the third grade, is the most important fundamental skill for learning (Snow, 1983; Barr & Parrett, 2001). Not being able to read may result in negative feelings and behaviors toward self and others. Low self-confidence, self-concept, and disruptive behaviors are some of these reported influences of inability to read. Reading ability has been correlated to a variety of unacceptable outcomes such as dropping out of school, unemployment, and incarceration (Barr & Parrett, 2001).

Disability related factors such as limited communication skills and /or having a learning disability (LD) may lead to behavioral problems. Children with severe speech and language disorders may be more likely to use physical action such as aggressive behaviors to communicate (Carr & Durand, 1985). The increase in the diagnosis of students with attention deficit /hyperactivity disorder (ADD/HD) and fetal alcohol syndrome (FAS) bare among disability related factors (Larson & McKinley, 1995). ADD/HD may put the child at risk and lead to academic failure and behavioral disorders if necessary services are not provided.

A large number of studies in the field of education indicate the existence of a relationship between minority status, English language abilities and learning (Pallas et al., 1989). However, specific relationships between the behavioral characteristics and co-occurring disabilities or risk factors of these students have not been investigated in depth. The next section will include an overview of concomitant disorders and a summary of research.

Overview of Concomitant Disorders

The coexistence of language/learning disabilities and behavioral disorders has been investigated and reported by researchers from various disciplines for the last two decades (Doherty, & Hummel, 1990; Griffith, Rogers-Adkinson, & Cusick, 1997; Warr-Leeper, Wright, & Mack, 1994). The relationship between attention deficit hyperactivity disorder (ADHD) and emotional/behavioral disorders (EBD) (Kim & Kaiser, 2000; Resta & Eliot, 1994) as well as learning disabilities (LD) has received increased attention in recent years (Gibbs & Cooper, 1989; Rock, Marjorie, Fessler, & Church, 1997). On the other hand, the relationship between language disorders and emotional/behavioral disorders has not been well understood or described (Warr-Leeper et al., 1994).

Research suggests that co-occurring disabilities are quite common among children with disabilities (Fessler, Rosenberg, & Rosenberg, 1991). Based on the data from the National Household Income Survey (NHIS-D), the prevalence of co-occurring disabilities was reported to be 32 percent, which is lower than percentages reported in previous research: 68 percent of special education students had a single disability, 23 percent had two disabilities, and 9 percent had three or more disabilities. Of children with two disabilities, 49 percent of co-occurring disabilities were reported to be learning disabilities and speech / language impairments and 24

percent were reported to be learning disabilities and emotional disturbance (U.S. Department of Education, 2000).

The relationship between different background factors (gender, ethnicity, and race) and having more than one disability has also been investigated. No significant differences were reported between the gender distribution of children with one disability and two or more co-occurring disabilities. It was reported that Hispanics were slightly less likely than non-Hispanic students to have co-occurring disabilities, 29 percent compared to 32 percent. In addition, Hispanic students appear to be underrepresented in programs for students with speech and language impairments (Harry, 1994; Westat, 1998).

According to the Annual Report to the Congress (2000) the critical role that the family structure and living conditions play has been repeatedly demonstrated. It was reported that students with two or more disabilities were more likely to live with a single parent (36 %) or no parent (50 %) than students with a single disability (32 %). The relationship between co-occurring disabilities and poverty level was reported to be not significant. (U.S. Department of Education, 2000).

Learning disabilities and emotional disturbance frequently co-occur (U.S. Department of Education, 2000). Studies of children and adolescents with emotional/ behavioral disorders (EBD) have found that 38 percent to 75 percent of individuals were also identified as having learning disabilities (Fessler at al., 1991; Forness, Benneth, & Tose, 1983). Reports of studies related to delinquent youth and/or children with mental health problems furthered the argument by indicating the presence of learning disabilities in children with both conduct disorders and emotional disturbance. Researchers reported a range of (27% to 38%) prevalence of co-occurring

psychiatric/conduct disorders and learning disabilities (Fessler et al., 1991; Javorsky, 1995). These children were often not qualified for the services under Individuals with Disabilities Education Act (IDEA). Among children with learning disabilities and behavioral disorders, the most common type of problem behavior is classified as internalizing behaviors (such as sadness, withdrawal, and anxiety) comprising from 6 percent to 20 percent of this group (U.S. Department of Education, 2000; Hinshaw, 1992).

The presence of behavioral problems appears to increase with the student's age and the severity of concomitant learning disability. Early indication of behavioral disorders including disruptive behaviors in the classrooms may be increasing the number of the referrals for assessment. Misidentification of children with EBD, ADD/HD with LD has been reported in the recent literature. Cullinan and Epstein (1985) found that behavioral problems failed to differentiate students with LD from students with EBD at senior high school level which point out the difficulties educators face daily in providing necessary services.

The general emphasis of studies that investigated issues related to co-occurring disabilities and students at-risk was the need to further the discussion in identification and service of children with complex characteristics. The proposed study will focus on language deficits of children who are at-risk for behavioral disorders. The next section will present a short review of the current research on incidence and prevalence of language deficits of students who are at-risk and/or with identified disabilities.

Language Deficits of Students At-Risk and/or with Identified Disabilities

Language disorders have a profound effect on school performance and frequently co-exist with other disabilities (e.g., learning disabilities, behavioral disorders). Students' spoken

language disabilities frequently underlie and interact with reading failures that may persist into adolescence and adulthood (Aram, Ekelman & Nation, 1984; Allington & Fleming, 1978; Snow, 1983). Language provides the main method of establishing and maintaining social relationships, organizing behavior, and is central to successful acquisition of many cognitive and academic skills, particularly literacy (Snow, 1983). It was stated that the failure of the language system canb have concomitant effects on social, academic, and vocational success (Warr-Leeper et al., 1994).

Many researchers have suggested a confirmed deficit in social communication among children with emotional/ behavioral disorders and learning disabilities (Rosenthal & Simeonsson, 1991; Gresham, 1982; Griffith et al., 1997). Gresham (1982) proposed that school-age children with behavioral disorders lacked knowledge across a number of social skill areas (Pragmatic). Pragmatic skills are necessary for positive and successful interactions among peers and adults (Griffith et al., 1997). These skills are cooperation, positive interaction, sharing, greeting, asking for or giving information and conversation (beginning, maintaining and ending). In addition, difficulties with turn taking in conversation (Mathur & Rutherford, 1994), repairing communication breakdowns, negotiating the flow of the conversation, sensitivity to tone of voice, and "reading" of nonverbal cues (such as gestures and facial expression) have been stated to be some of the difficulties students with behavioral disturbance experience (Griffith et al., 1997).

About half of the students with LD have significant language disorders (Cantwell & Baker, 1985; Wiig & Semel, 1984), as do nearly three fourths of students with EBD (Camarata, Hughes, & Ruhl, 1988). Students with concomitant LD/EBD often exhibit language disorders

that significantly affect their academic performance, feelings of self worth, and their social interactions with both peers and adults. Many of the defining characteristics of learning disabilities are language related: difficulty with listening, speaking, reading, and writing (Snow, 1983; Gibbs & Cooper, 1989). Gibbs and Cooper (1989) reported that, in their study, 96.2 percent of 242 students with learning disabilities had one or more communication disorders, including speech, language, and hearing disorders. The Annual Report to Congress (2000) indicates the most common co-occurring disorders to be language disorders representing approximately 90% of the sample.

Children with language disorders have been described as poor communicators, relative to their normal peers. On a number of pragmatic measures, such as clarification responses and the use of cohesive discourse devices, language impaired children perform below their age peers (Lahey, 1988). They are often seen as less responsive and less able to maintain a conversation with their peers. Their discourse skills are limited. Rice, Sell & Hadley (1991) indicated that children with language impairment would be at risk for social interactions with their normal peers in integrated preschool settings. Conversational appropriateness is a constant concern in language learning disordered children. Although these children may seem to have a mastery of the formal aspects of language, their conversation skills may be characterized by odd manner of expressions, unexpected utterances, and unawareness of the needs of conversation partners (Prescott & Klecan- Aker, 2001). These deficits are also common to children with ADD/HD.

For children at risk for behavioral disorders, the importance of competence in communication has been established. Many adolescents with communication disorders remain undetected and un-served (Larson & McKinley, 1995). The proactive strategies for intervening at

an early age are very critical in preventing behavioral disorders (Conroy & Davis, 2000) and learning problems at older ages. The following discussion will include the importance of language and its relationships to literacy. An overview of written language skills and assessment, and a summary of related research will follow.

Language and Literacy

For the last two decades, the relationship and the interaction of language and literacy have been studied by researchers in various related fields. In order to understand the fundamental causes of learning disabilities and academic failure including reading and writing difficulties, researchers investigated the role of language in literacy development. The results of the studies led the discussion to a new domain. Snow (1983) stated that the acquisition of language and literacy are very similar to one another. She further indicated these similarities to be (a) the complexity of the learning involved, (b) the nature of the social interactive factors that contribute to acquisition, and (c) the child's increasing ability to perform the tasks required without the support of social, physical, or historical context. Language learning is a natural process while almost always literacy skills are acquired following an instruction. Reading and writing tasks that are presented in school are two examples of decontextualized language use. Snow further argues that the basic reason for children's failure in the middle grades may not be the difficulty of literacy but the problems associated with decontextualized language use (1983).

In their position statement on language and literacy, the Ad Hoc Committee of American Speech-Language-Hearing Association (ASHA) stated that language problems are both a cause and a consequence of literacy problems. Reading and writing are highly interrelated as processes and in contexts where they occur. They reported that the following connections exist between

spoken and written language: (a) spoken language provides the foundation for the development of reading and writing (b) both have a reciprocal relationship (c) children with spoken language problems often experience difficulty learning to read and write, and children with reading and writing problems frequently have difficulty with spoken language; and (d) an instruction in one can result in growth in other forms of language. Any difficulty in the learning process of listening, speaking, reading, and/or writing may involve any of the components of language phonology, morphology, syntax, semantics, and pragmatics. These difficulties may be observed in the production, comprehension, and awareness of language at the sound, syllable, word, sentence, and discourse levels. In addition, individuals who have reading and/or writing difficulties may also experience difficulties in using language strategically, which may interfere with their communication, thinking and learning.

Hayes and Flower (1987) described written-language production from two perspectives; process and product. Writing processes include the cognitive-linguistic and motor acts that are involved when generating written texts. They include planning, organizing, and drafting, reflecting, revising, and editing. Written products are the result of the writing processes which can be examined at several levels: at the word level (e.g., word choice, spelling); sentence level (e.g., grammar, complexity, styles), and text level (e.g., discourse structure, cohesive devices, coherence). They also may be described relative to writing conventions (e.g., capitalization, punctuation, and paragraphing), and relative to communication functions (e.g., to entertain or inform) and effectiveness (Polloway, Patron, & Cohen, 1981).

In general, writing behaviors of students with disabilities are characterized by transcription errors, impoverished ideas(Graham, Harris, MacArthur, & Schwartz,1991), missing

elements and apparent lack of effective strategies (Graham et al., 1991; Englert & Raphael, 1988) to activate their prior knowledge (Englert & Raphael, 1988), processes to plan, organize, and revise, less time spent on writing, difficulty in organizing text, lack of meta-cognitive controls, such as failing to monitor or correct, and more dependence on external sources such as teachers (Englert & Raphael, 1988).

Although the written language skills of children with behavioral disorders were not studied in depth, several researchers investigated the writing difficulties of students with LD. These difficulties reported to be a function of their difficulties in producing text. Previous research showed that students with LD have problems with such basic skills as spelling, handwriting, punctuation (Deno, Marston, & Mirkin, 1982; Graham, Boyer-Schick, & Tippets, 1989; Moran, 1988). Graham et al., (1991) explained that because students with learning disabilities attend to the lower level skills of getting language onto paper they may have difficulties with other writing processes such as planning and content generation.

Considering the effects of language development on students' performance, it is essential to assess the language (oral and written language) skills of students with concomitant behavioral disorders. This information will allow professionals to modify task demands or increase support in language-intense situation using effective strategies, therefore preventing some of the negative behavioral and emotional reactions of students with both learning and behavioral disorders.

Purpose of the Study

The purpose of this study was to determine the written language skills of middle and high school students who are enrolled in an alternative education setting in Orange County, California. Orange County Department of Education (OCDE), Division of Alternative Education

provides alternative programs and settings to students who cannot function in regular school settings for various reasons. Two groups of students who are identified as either under Delinquency Prevention Program (DPP) or Court Ordered Probation (COP) were compared both to each other and the norms. Students who are referred by their school districts or following a parent request because of truancy, low credit, disruptive behaviors, inability to function in the school setting, and other minor discipline code violations are placed in this program by a probation officer who meets with students and their parents prior to enrollment to the program. On the other hand, students who are classified under group COP are those who have been found guilty of a crime, and placed on probation by the court. Some students are referred to alternative education programs under formal probation, while others have the following additional reasons indicated on their referral form: substance abuse, truancy, both mandatory and non-mandatory expulsion, and other school related reasons. Students' written language skills were determined using the Test of Written Language-3 (TOWL-3) (Hammill & Larsen, 1996). In addition, this study investigated possible relationships between the written language competency, academic achievement, behavioral characteristics, and selected demographic characteristics such as gender, ethnicity, and English language designation.

Research Questions

In order to address the research problem, the following questions guided the study:

1. How do students in groups DPP and COP differ on selected personal, academic, and demographic variables?

    1A. Is there a significant difference between students who are identified under Delinquency Prevention Program (DPP) and those who were

identified and served under Court Ordered Probation (COP) on measures of written language skills as measured by TOWL -3 and academic achievement as measured by STAR math and reading scores?

1B. Are there significant relationships between written language skills and school sanctions for problem behavior for students in group DPP and group COP?

1C. Is there a relationship between school sanctions for problem behavior and academic achievement of students in group DPP and group COP?

1D. Is there a relationship between written language skills as measured by TOWL-3 and academic achievement as measured by STAR reading and math scores of the participants in both groups?

2. Do relationships exist between behavioral characteristics as measured by number of suspensions, written language abilities as measured by TOWL-3, academic achievements measured by STAR math and reading scores and selected demographic characteristics (gender, ethnicity, language competency in English and being classified under group DPP or COP)?

Significance of the Study

Behavioral problems are among the main concerns of educators. Serious atypical behavior during adolescent years prevents successful school achievement, and serves as the basis for later delinquency and crime (Cassel, Chow, Demoulin, 2000). There has been limited amount of work that addressed the preventive intervention strategies and early identification of students who are at risk for behavioral disorders. Numerous factors influence both the academic and

behavioral well being of the student. The importance of language abilities and co-occurring disabilities has been an emerging area of research. It is essential to understand the language abilities of children who are at risk for behavioral disorders in order to provide the services that are needed.

Oral language of students with behavioral disorders has been studied; however the writbten language abilities have not been investigated or well understood. This study is designed to enhance the understanding of the relationship between behavioral disorders and language disorders. In summary, the outcomes of this study indicated important concerns regarding the minority students being more at-risk for both academic failure and behavioral disorders than their peers. In addition, they were found to be performing far below the norms for their age on the measures of written language skills.

The findings that were generated from this study should aid educators in both school systems and university settings to design preventive intervention strategies in order to reach students who are at- risk for the development of behavioral disorders and delinquency at early stages. In addition, the findings of this study may guide researchers/academicians in training teachers with a full understanding of co-occurring disabilities and effective strategies to meet students' needs. Results of this study should complement the results of other existing studies in the field.

CHAPTER 2

LITERATURE REVIEW

The purpose of this study is to investigate the written language skills of middle and high school students who attend an alternative program and, at-risk for the development of behavioral disorders and delinquency. It was hypothesized that students who exhibit behavioral problems may also experience difficulties in written language skills and perform poorer than their peers on those skills. The research in the field provides evidence that both oral and written language skills play an important role in both academic and emotional development of children and adolescents. There is sufficient research that examined the oral language skills of children with behavioral problems however; their written skills have not been studied in detail.

The review of literature is intended to provide the foundation for studying the written language skills of students who are at risk for developing behavioral disorders and the importance of preventive intervention programs. The focus of this investigation will include past and current research in factors that put the children at-risk for the development of both academic and behavioral disorders, coexistence of disabilities with communication disorders including behavioral disorders, learning disabilities and attention deficit/ hyperactivity disorder, identified psychiatric disorders and delinquent youth. In addition, research on oral and written language skills of children with disabilities, discipline issues in schools and identification and intervention issues will be presented. Based on the review of literature, the gap that this study intended to fill will be identified.

A Summary of Research on Risk Factors

Researchers have begun to examine the relationships and interactions among child variables, school program characteristics, student/ community demographic characteristics, socioeconomic variables from different perspectives including their relationships and their influence on special education practices and outcomes (Conroy & Davis, 2000; Coutinho & Oswald, 1998). These relationships among socio-cultural variables and educational outcomes are reported to be very complex.

During the past several years, researchers have investigated the variables that maintain problem behavior. They have used several techniques to identify behavioral problems and their interaction with both environmental and developmental factors. This section will include a review and critique of studies that have used both descriptive and experimental methods, in order to determine the motivation behind the behavioral problems. The research findings will be presented under the categories of environmental and developmental/disability factors.

Environmental Factors

Applying an ecological approach, researchers have been investigated the complex nature of emotional behavioral disorders. From this perspective, Forness (1981) suggested that problems arise as a result of the interaction between an individual child and the countless unique environments he/she passes through. Forness (1981) further described this complex concept as following: "The sum total of the interaction, the 'ecosystem,' becomes the focus for treatment and intervention. A child is viewed as a stimulator or exciter who elicits reactions from a variety of responders (peers and adults) in the environment. The degree of disturbance depends on the number of behavioral codes broken by the child in the community of responders. The classroom

thus becomes an ecosystem with different types of children potentially exhibiting various degrees of discordance between their own behavior and the expectations of teachers, peers, and parents" (p.59).

For instance, in addition to the prevalence of deviant behavior that emerges during adolescence, a time when parent-adolescent relationships are changing (Larson & McKinley, 1995), the mismatch between an adolescent's behavior and parents' expectations may cause an emotional disturbance. It is vital to identify the ways in which family processes are involved. Patterns of communication, cohesion, and parenting behavior that may either impede or promote the adolescents' developmental changes are some of the very important components of family dynamic (Larson & McKinley, 1995). However, this shift in family dynamic in order to meet the challenging needs of the adolescent has received little attention.

Bear (1999) examined whether family bonding and parental monitoring constrain an adolescent's tendency to engage in deviant behavior. With the purpose of determining if adolescents' perception of dyadic communication, family bonding, and parental monitoring were significantly associated with their reports of deviant behavior, the researcher surveyed boys and girls (N=7411) who are 7th, 8th, and 9th graders from 3 different ethical groups: Mexican-American, African-American, and Euro-American. Bear's research questions included whether or not direct control (parental monitoring) and indirect control (emotional bonding) constrain adolescent deviant behavior in minority groups; whether or not ethnic and gender differences in family bonding, communication patterns, and parental monitoring exist as these relate to deviance in each group; and whether or not significant ethnic differences between boys and girls.

In addition, whether or not parental facilitation of the adolescents' independence significantly correlated with deviance is investigated.

In Bear's 1999 study, data were collected using a survey questionnaire that consisted of multiple choice items. The questionnaire assesses the following constructs: open and positive communication; family cohesion; detachment between the adolescent and his or her parents; parental monitoring; parental facilitation of independence; and deviant activity. To insure the applicability of the survey instrument to ethnic minorities, item response theory was employed with a pilot group prior to data collection. In this study, attachment was defined as the adolescent's perceptions of open and positive communication; the parent as a good listener, as understanding, as honest, easy to talk to, non controlling, and supportive (Barnes & Olson, 1985 as cited in Bear 1999). Attachment was also measured by an index of family cohesion that asks how close family members feel to each other and how much time they spend together. Open Family Communication was also reported to be a subscale of the Parent Adolescent Communication scale (PAC) (Barnes & Olson, 1985 as cited in Bear 1999). The ten five- point Likert- type items were derived from factor analysis, providing construct validity for the measure. These items measure the positive aspects of parent adolescent communication focusing on the degree of satisfaction and understanding experienced by the adolescents in their interactions with parents. The alpha for the current sample was .94.

In order to assess the openness of communication between the adolescent and each parent, subjects completed the same ten items in reference to both their mothers and fathers. The concept of direct control was measured by the parental monitoring subscale of the Assessment of Child Monitoring scales (Hetherington & Clingempeel, 1999 as cited in Bear 1999). The

subscale consists of seven, five- point Likert- type- items measuring the monitoring of character development and deviant behavior. The subscale was administered separately for mothers and fathers. Cronbach's alpha was .89. Detachment was measured by the 'non dependency on parents' and 'parental dieselization' subscales of the Emotional Autonomy scale (EAS) (Steinberg & Silverberg, 1986 as cited in Bear 1999). Factor analysis of the instrument indicated two factors that were subsequently labeled detachment and differentiation. The alpha for the detachment subscale (ten items) was .81. The Facilitating Independence subscale of the Parental Relations Questionnaire (PRQ) (Kenny, 1987 as cited in Bear 1999) consists of eight Likert-scale items assessing the degree to which the adolescent perceives his or her parents as encouraging or discouraging independent behavior and decision making.

The self reported deviant subscales of the Deviant Behavior scale (Jessor & Jessor, 1977 as cited in Bear 1999), parents facilitate independence, and detachment on dependent variable deviance was tested. The correlations between the variables, the unstandardized regression coefficients (B), the standard error term (SE), the standardized regression coefficients (b), and R^2 were presented; t-tests were conducted to examine differences in beta weights in the three ethnic groups.

The researcher reported mixed results: some supporting Hirschi's social control theory. Direct parental control was indicated to be significant for all mothers of boys and girls and in all in (Bear, 1999) measured deviant acts. The alpha for this sample was .93. The subscale includes items about stealing, lying, property destruction, disruptive behavior, and aggression. A multiple regression procedure was performed for boys and girls in each ethnic group. The relationships between the predictor variables: Communications with mother, communication with father,

mother monitoring, father monitoring, family cohesion, the ethnical groups. This finding has implications for prevention that were relevant to parent education. Previous research reported evidence that parent education programs, especially with families in disadvantaged and highly-stressed environments, promote closer parental monitoring in addition to improving parental skills, parental competence, and knowledge about child development (Bogenschneider & Stone, 1997 as cited in Bear 1999).

The sample size of the study was very large and ethnically heterogeneous which enhanced the generalizability of the study. The study exhibits several limitations. First, this was a multiethnic study of 'adolescent limited' deviance, within a family developmental context. Since this was not a clinical sample, caution must be exercised in generalizing from the findings. Second, the data were collected using only adolescent self-reports and did not include any parent reports which may represent a missing component in the study. Third, in order to examine etiological processes, longitudinal data are required and in this study cross-sectional data was used therefore it constitutes important limitations. Finally, the differences were reported to be reliable and consistent, however they were often small differences and should be interpreted cautiously (Bear 1999).

In addition to direct parent monitoring, parents' involvement in schools was also reported to be a strong indicator of children's academic success at school. A study conducted by the National Center for Educational Statistics (NCES, 1997) investigated the involvement of fathers and whether their involvement mattered in their children's success. Low involvement was defined as participation in none or no more than one activity at school over the course of a year, moderate to be two activities, and high involvement to be three or four activities. The activities

include attending a regular school meeting, a parent-teacher conference, a class meeting or event, or volunteering.

The study used a number of school outcome indicators including earning mostly A's in school and student retention. Overall, the results indicated that children are most likely to be successful when both parents have high involvement in their children's school, and far less likely to succeed when there is low involvement. These relationships were found even after other factors that might influence children's success, such as race and ethnicity, parents' education, and family income, were statistically controlled**.** Specifically, this survey found that children do better in school when their fathers are involved in their schools, regardless of whether their fathers live with them, and whether their mothers are also involved. A positive finding about single parenting was reported that single parents have high level of involvement in their children's schools, almost as much as mothers in two parent families. On the other hand, if the parents' involvement is low regardless of the family structure, the chances of student success in school are reported to be dramatically reduced (NCES, 1997).

For the purpose of this study, the finding and discussion on suspension and expulsion are important. The involvement of both single fathers and single mothers is found to reduce the chance of 6th through 12th graders being suspended or expelled from school. If single fathers are highly involved in their children's schools, the probability that children have ever been suspended or expelled is 72 percent lower than if the fathers have low levels of involvement (NCES, 1997). Parent participation was indicated to be important and related to the parent education level. Parent education level provides indications for the socio economic status that is important to study as one of the variables that put children at-risk. The survey technique was

used in collecting these data and relied on self-reporting, therefore should be interpreted with carefully.

Included in the study of interaction of individual and school related factors such as teacher-student interaction, peer interaction and truancy (Carran et al., 1996), a related line of research has examined the effects of 'curricular' variables on problem behavior (DePaepe, Shores, Jack, & Denny, 1996; Dunlap & Kern, 1993). Using descriptive and experimental methods, researchers have stated that variables such as task length (Kern, Childs, Dunlap, Clarke, & Falk, 1994), task difficulty (Weeks & Gaylord-Ross, 1981; DePaepe et al., 1996), preference (Foster Johnson, Ferro, & Dunlap, 1994), and choice (Dunlap, dePerczel, Clarke, Wilson, Wright, White, & Gomez, (1994) can have significant effects on both problem and appropriate behavior in classrooms. DePaepe et al., in their 1996 study, indicated presence of an association between the difficulty of the task students presented with and the lower percentage of time on-task. They further stated that as students faced with difficult tasks, they were engaged in disruptive behaviors at higher percentages than when they had easy tasks. Umbreit, (1995) suggests that assessment based curricular modifications can be implemented effectively for the purpose of improving behaviors in school environments.

The role of peers in fostering deviant behavior in adolescence is well documented in the sociological literature. Aseltine (1995) indicated that peer influence has been projected through various mechanisms such as 'delinquent subculture' or 'subcultures of delinquency' and /or 'gangs'" (Akers et al., 1979) to socialize youths into delinquent or criminal behavior. Individuals are socialized into deviant forms of conduct through involvement with delinquent

groups (Carran et al., 1996) which is also an important component of the environmental factors that needs to be addressed.

Developmental/Disability Related Factors

Serious atypical behavior during adolescence years can prevent successful school achievement and serves as the basis for later delinquency and crime. Early identification of children who are at-risk for EBD and conduct disorders is the first step in providing preventive programs in order to keep the youth in the community and out of prisons. These programs and involved variables have been studied from different perspectives by researchers in various disciplines such as psychology, sociology and special education.

Cassel (2000) investigated the individual characteristics and interacting environmental factors in identifying the students who are at-risk of serious behavioral and mental health problems. In order to identify high school freshmen with serious atypical behavior and mental health problems and for delinquency prevention purposes, Cassel et al. (2000) administered two psychological tests to 100 high school freshmen: (1) The Democratic Maturity Test (DEMO) (Cassel, Chow, Demoulin, &Rager, 2000), and (2) The Cognitive Dissonance Test (DISS) (Cassel, Chow, Demoulin, & Rager, 2000) . The Democratic Maturity Test (DEMO) (Cassel, Chow, Demoulin, & Rager, 2000). The eight part scores serve as the basis for identifying individuals at serious odds to that of the norm group: (1) Self-Esteem, (2) Coping skills, (3), Assertiveness, (4) Locus of Control Decision Making, (5) Conformity, (6) Sympathy, (7) Self Efficacy Expectations, and (8) Caring. Any one or more of the eight score that are significantly below average for the norm group suggest an atypical ego not sensitive to the expectations in that area in relation to others, and the potential of being an atypical individual. This test was

administered to 100 of the 126 incoming freshman at Pleasantville High, but only 73 students completed the test successfully. Only two of the eight part score for students departed significantly from the national norm: (1) Much higher on Self Esteem, and (2) Much lower on Locus of Control Decision Making.

A t-statistic was computed between the mean DEMO 8 part scores for male and female freshbmen. The results of the study indicated some gender differences: (a) females showing greater personal expectation in life than males ($p \leq .01$), (b) females tend to get alone much better with other individuals than males ($p \leq .03$); (c) females are better prepared for success in a democracy than males ($p \leq .04$).

The second test administered was The Cognitive Dissonance Test (DISS) (Cassel, Chow, Demoulin, and Rager, 2000). The eight part scores on DISS serve as the basis for identifying individuals with the potential for mental health problems: (1) Home & Family, (2) Inner Development, (3) Personal Adjustment, (4) Health and Well-Bing, (5) School & Learning, (6) Social & Affiliation, (7) Survival & Power, and (8) Life Pursuits. People with DISS scores that are significantly above average for corresponding others suggest they are atypical in relation to such scores. Only one of the eight part DISS scores showed a statistically significant difference from the DISS national norm group which was Health & Well Being. The sample score was 46 and National Norm was 42. This difference was indicated that sample students showed lower performance on 'Health and Well Being'.

The participants in this study, high school freshmen, indicated that 28 of the 75 freshmen tested came from a single parent home. Of those 28 single parent homes, 4 lived with father, 3 with grandparents, and 21 with the mother. In general, scores on the cognitive dissonance show

that sample students came from homes that provided a good and wholesome environment and this includes the single parent homes which agrees with the recent research suggesting that the single parent home is often better than a disfunctioning double parent home. This information may be beneficial in designing early identification and intervention programs for students who are at-risk of severe behavioral disorders.

Culturally/Linguistically Diverse Learners At-risk

There is an overwhelming evidence that the degrees of risk today's youth face is affected by their social, ethnic, or racial backgrounds (Brice, 2002; Carran et al., 1996; MacArthur, 1993; Gonzales, 2000). For example, black male adolescents are five times as likely to die as a result of homicide as white males, and black girls are two to three times as likely to become homicide victims as white girls (Hechinger, 1992, p.29).

It is indicated that during the last decade the Spanish-speaking population (5 years and older) grew by 56 percent and eight times as fast as the non-Hispanic population; however the social and educational outcomes for minority students have not been positive. Children with limited language skills may have a greater difficulty than their peers in meeting school expectations for precise and complex language use. Brice (2002) stated that adolescent Hispanic students face a difficult and often "abbreviated school career" (p.14). Hispanic children who are attending schools are most likely to (a) be below expected grade level, (b) perform significantly poorer than non-Hispanic groups (MacArthur, 1993; Brice, 2002), (c) complete fewer years of school than other population groups (MacArthur, 1993). MacArthur (1993) stated that among foreign born Spanish speakers, those who had immigrated after 1980 had higher drop out rates than those born in the United States, (d) children who have ethnically and linguistically diverse

backgrounds are disproportionately identified as disabled and disproportionately placed in more segregated settings.

Many political, societal, educational, and economic variables have influenced these statistics. When IDEA was reauthorized in 1991 as P.L 101-476, the current situation and the need to achieve greater success in the education of minority children with disabilities was clearly stated. According to the U.S. Department of Education (1995), 36 percent Mexican Americans and 32 percent Puerto Rican-American drop out of school in comparison to a Caucasian drop out rate of just 13 percent. Congress concluded that those minority children with disabilities who live in high poverty and urban environments are at particularly high risk for educational failure and poor outcomes because of inappropriate identification, placement, and services (Coutinho & Oswald, 1998).

Recent research with Spanish-speaking children with and without language impairment also showed that the mean length of utterances contributed to the identification with language impairment (Restrepo, 1998). Thus, it is possible that measures of syntactic complexity reveal differences in language performance across students with different levels of literacy achievement. Restrepo (1998) compared the syntactic skills of Spanish speaking children with low and average school achievement from kindergarten to fifth grade using oral narratives that were elicited with book and film retelling tasks. In contrast with previous studies, that examined task differences along contextualized/decontextualized dimensions, Restropo (1998) compared children's performance across the two elicitation procedures using a decontextualized task. The participants were asked to retell the stories after the movie and book viewing were completed. No visual support was provided. Although the tasks were based on the same story, the film story

was expected to be more 'memorable' than the book. The film-retelling task was thus expected to elicit a greater use of complex syntax than the book retelling.

Results indicated that children who were performing below grade expectations exhibited limited use complex syntax and greater formulation difficulties in their narratives than their peers. There were no significant task differences in the use of complex language. The analysis of children's syntactic performance in narratives provided information regarding language skills that appeared related to school achievement**.**

Larson and McKinley (1995) indicated that the more external and internal assets a youth has, the fewer at-risk behaviors he/she will exhibit. Although interactions between these factors have been studied, there are no quick fixes or simple solutions for the problems that place learners at risk. Following discussion of research will review studies in EBD, language learning disorders and their relation to communication disorders.

Studies of Children with Coexisting Disabilities

"Children and youth who are described as having Emotional and/or Behavioral Disorders (EBD) exhibit a variety of behavioral patterns that are considered to be undesirable and in need of intervention. These patterns of behaviors include aggression, noncompliance, disruptive verbalization, withdrawal, tantrums, and inappropriate or deficient social skills" (Dunlap & Childs, 1996, p.125). Students identified with EBD are at risk for many educational problems that include a significantly high dropout rate; high absenteeism; a high rate of suspension; and alarmingly poor overall academic achievement (Carran et al., 1996; Larson & McKinley, 1995)**.**

Children with learning disabilities also experience some of these difficulties. These characteristics common to both learning and emotional behavioral disability categories have

been summarized as deficits in executive functioning, hyperactivity, poor social skills, and inattention. These characteristics provide further evidence of the concomitance of learning and emotional /behavioral problems accounting for the poorest overall outcomes.

Reports of overlapping learning and behavioral problems are especially considered characteristics of attention deficit hyperactivity disorder (ADHD) (August & Garfinkel, 1989, 1990; Dykman & Ackerman, 1993). Some students with LD/EBD are also identified as having ADD which is a cluster of syndromes that includes a short attention span, difficulty concentrating, poor impulse control, distractibility, moods that quickly change, and sometimes hyperactivity and a learning disability/oral and written language disorders. Their writings are often poorly organized, consists of scrambled information which frequently results in reaching to wrong conclusions and written products that are below expected level (Larson & McKinley, 1995).

Miniutti (1991) studied language deficiencies in 6-9 year-old inner-city children with learning and behavioral problems. The results of the study indicated significant language impairments in over 75 percent of children with both learning and behavioral disorders as rated by their teachers. Language difficulties were reported in both receptive and expressive language skills of children with behavioral disorders (as cited in Warr-Leeper et al., 1994).

Dykman and Ackerman (1993) classified elementary school age boys with ADD into three behavioral groups based on Luria's (1961) work; hyperactive, normally active, and hypoactive. They studied the characteristics of these boys at elementary school level using a classroom teacher's rating scale. They indicated that when they studied the same group of children again at age 14, the hyperactive group had numerous reports of episodes of conflict with

authority figures (home, school and community), whereas the behavioral reports of the non hyperactive groups were similar to those for the normal control group.

Social communicative language skills play a critical role in overall development of children and impede interpersonal communication and academic progress if they are not sufficient. Deficits in the social domain are important to recognize because of their potential negative impact on both social and academic achievement (Parker & Asher, 1987). The negative influence of social skill deficits is reflected in heightened risk among adolescents and adults for school dropout (Ullman, 1957), psychiatric dysfunction (Cowen, Pederson, Babigian, Izzo, & Trost, 1973), juvenile delinquency (Carran et al., 1996) and criminal behavior (Parker & Asher, 1987; Kavale & Forness, 1996).

There have been a number of reviews focusing on specific social skill deficits of children with LD, including self-concept (Chapman, 1988), peer status (Wiener, 1987), interpersonal skills (LaGreca, 1987), social adjustment (Bruck, 1986), social competence (Gresham, 1988), behavioral functioning (Thompson & Kronenberger, 1990), classroom behavior (Bender & Smith, 1990), communicative competence (Donahue, Pearl, & Bryan, 1983), and social perception (LaGreca, 1981; Maheady & Sainato, 1986; Kavale & Forness, 1996). When, social skill deficits interact with LD, there is the potential for unfavorable consequences (Gresham & Elliott, 1989).

Blalock (1981) argued that adolescents' oral language deficits and social skill deficits prevent quality interactions with others and impede close friendships. An example of this was a study done with a group of adolescents with moderate disabilities. The researchers noted that adolescents with moderate disabilities were less talkative when conversing with non-disabled

peers than with fellow peers with disabilities (Nisbet, Zanella & Miller, 1984). In addition, their speech was indicated to be "simple, direct, imperative, and informal" (Bergman, 1987, p.162).

Communication Skills of Students with Identified Disabilities

Emotional Behavioral Disorders

The literature in the field indicates evidence that children with behavioral disorders also experience language disorders (Camarata, et al., 1988; Kaufman, Swan, & Wood, 1979). Griffith et al., (1997) reported that the prevalence of language and behavioral disorders rose from 44 percent to 66 percent over five year- old follow –up period in their study. Many preschoolers with language disorders subsequently develop emotional problems. Studies reported teachers' impression of language problems in the population of behavioral disordered children to be in oral comprehension, retention, following directions, and expressive language (Kaufman et al., 1979), the presence of a relationship between behavioral and academic problems and verbal skills (McDowell, Adamson, & Wood, 1982), and below grade level on listening comprehension performance (Scruggs & Mastropieri, 1986).

Communication skills of emotionally/behaviorally disordered adolescents are both less informative and less effective than that of their non- disturbed peers. They were also found not to be as effective as their non disturbed peers in providing distinguishing attributes in their communication. Rosenthal and Simeonsson (1991) suggest that since adolescents with EBD produced significantly less information and communicated less effectively, they were not considering their listeners' needs for either redundant information or unique attributes. This suggests a relationship between referential communication disorders and emotional disturbance.

Camarata et al. (1988) examined the language skills of 38 children with mild to moderate behavioral disorders who were enrolled at least half-time within special day class in a regular elementary school. The age range of the subjects was reported to be 8; 9 to 12; 11 and the grade placement in third to sixth grades. The Test of Language Development-Intermediate (TOLD-I) (Hammill & Newcomer, 1982) was used as the primary tool in assessment of language skills of the subjects. The TOLD-I includes subtests in the areas of sentence combining (SC), characteristics (CH), word ordering (WO), generals (DL), and grammar comprehension (GC). The TOLD-I was administered to each subject individually and the results were compared to the published normative information provided. The results of the study using (TOLD-I) revealed that 37 of the children (97 %) fell a minimum of one standard deviation below the normative mean on one or more of the TOLD-I subtests. Concerning the speech and language services they were receiving, only 2 out of 38 subjects (less than 6 %) are reported to be receiving speech and language services and none had received formal language assessment.

The results of the within subject analysis across subtests and composite scores indicated that children with BD performed poorly on the sentence combination and word order tasks. The syntax quotient was found to be significantly lower than the semantic quotient. The participants of the study performed significantly higher on listening than speaking task. These findings support the hypothesis that children with mild to moderate behavioral disorders are at risk for language disorders. In addition, these findings suggest that speech and language assessment and access to speech and language therapy services should become a routine part of the management process for children with behavioral disorders.

Although this study only sampled a fraction of the total domain of language, it provides valuable information on language skills of students with behavioral disorders. In reporting and using this information the limited content of the study needs to be indicated. The spontaneous language and pragmatic language skills of the participants have not been assessed which might have provided critical information about social communicative and interpersonal relationships of children with EBD.

When the findings compared with those that studied the language skills of children with severe EBD, it was reported that the language skills of children with mild to moderate BD differ from children with severe EBD. The pattern of performance within language domains are reported to be reversed relative to semantic and syntactic performance. The language problems that are experienced by the children with BD are very similar to that reported in children with LD (Wiig & Semel, 1984). Camarata et al., (1988) further indicated that these similarities were in their receptive and expressive pattern of response to semantic, syntactic, and morphological tasks. When TOLD-Primary (Newcomer & Hammill, 1977) was administered to a group of children with LD, Hessler and Kitchen (1980) found that children with learning disabilities experienced oral language difficulties.

Griffith et al., (1997) compared two groups of students (day vs. residential) with severe behavioral disorders on several language measures to determine whether more severe language deficits were present based on restrictiveness of behavioral placement. The results of their study indicated no significant differences between groups on standardized measures, with both groups showing receptive and expressive language deficits below normal. Students in the day program were rated higher on conversational skills by their teachers than students in the residential

program which might be the result of many opportunities for verbal interaction with normally developing peers that model the speech spontaneously. Receptive language deficits found to be correlating with Interpersonal Difficulties and Inappropriate Behavior categories on the Behavior Evaluation Scale-2 (BES) which indicate a prevalence of co-occurring disabilities.

McKinley and Larson (1983, 1991) found that eighth grade students provided considerable nonverbal listener feedback during conversations, even more than they did while in seventh grade (as cited in Larson & McKinley, 1995). On tests of nonverbal sensitivity, females consistently outperformed males from grade school through the middle 20s (Knapp, 1978) however nonverbal ability was not found to be significantly related to intelligence quotients, class rank, scholastic aptitude scores, or vocabulary test scores .The findings suggest that if persons were good senders of nonverbal communication, they were also good receivers (Knapp, 1978).

In addition to oral language, nonverbal communication plays an important role in social communication. Nonverbal communication refers to communication that transcends spoken words and includes six categories: kinetic behaviors, physical characteristics, touching behavbiors, paralanguage (including voice quality and vocalization); and artifacts (e.g., perfumes, clothes) (Knapp, 1978). Nonverbal factors are major determinants of meaning in the interpersonal context. Birdwhistell (1970) asserted that only 30 to 35 percent of the social meaning of a conversation is carried by words. According to Knapp (1978), nonverbal communication serves following purposes: repetition, contradiction, substitution, complementation, accentuation, and resolution.

Research in nonverbal communication during adolescence has analyzed recognition of facial expressions. In 1920s, Gates (1923) conducted a facial expression recognition study and found that laughter was identified by age 3, pain by ages 5 to 6, anger by age 7, fear by ages 9 and 10, and surprise by age 11. Older children put more weight on facial expressions under normal conditions of communication and less under condition of discrepancy. Knapp (1978) reported that adolescents represent a low point for eye gazing which is important to note while assessing gazing behaviors during conversational speech.

Facial affect cues are important in signaling the need for a change in behavior. Because they fail to recognize these signals and identification of appropriate behavioral change, children with EBD were unsuccessful in changing their behaviors. Children with internalizing and externalizing disorders may differ in their ability to recognize facial affect cues (Walker & Leister, 1994). Children with internalizing disorders include those with diagnoses of anxiety, social withdrawal, and depression. In contrary, children with externalizing disorders include those with diagnoses of conduct disorders, oppositional disorders, and problems with impulse control (Achenback, 1985).

In their study, Walker and Leister (1994), investigated (1) whether the lower facial affect recognition skills of elementary-aged children with EBD continue into adolescence, (2) whether adolescents with internalizing disorders differ from those with externalizing disorders on their ability to recognize facial affect cues. They studied these issues using following six emotions: happiness, sadness, fear, anger, disgust, and surprise. The results of their study had several indications. Adolescents with EBD are less accurate than their non-EBD peers in their ability to recognize facial affect cues. The elementary age children's poorer recognition of facial affect

cues (Zabel, 1979; Elmore, 1982) are reported to be present during adolescence. Secondly, adolescents with externalizing disorders reported to be as proficient as non-EBD adolescents in the recognition of disgust which might be the results of many repeated exposure from non-approving peers and adults.

In addition, adolescents with externalizing and internalizing disorders were reported to be equally inaccurate in their recognition of anger, surprise, fear, and happiness facial affect cues. It was also noted that adolescents with internalizing disorders were less accurate in recognizing sadness and disgust than adolescents with externalizing disorders. A positive relationship was indicated between age and the ability to recognize facial affect for adolescents with externalizing disorders. On the other hand, adolescents with internalizing disorders require instruction in the recognition of facial cues (Walker & Leister, 1994).

Learning Disabilities

The significance of the communication deficits of many children with learning disabilities (LD) also has been noted (Wiig & Semel, 1984). The boundaries between communication disorders and learning disabilities often overlap, making it difficult to separate the effects of each from their combined effects. Besides having attention, perceptual and conceptual problems (Bryan & Bryan, 1990), the definition of LD include deficits in language comprehension and expression, oral reading and reading comprehension, spelling and writing, which is a language based skill. Children with learning disabilities consistently score lower than their classmates on a variety of linguistics assessments.

Based upon the review of the literature, the most prevalent communication disorder of the population with LD was language impairment. The prevalence rate of 90.5 percent exceeded

expectations based on previously cited estimations, which suggested that language deficits occur in approximately 50 percent of the population with LD. Wiig and Semel (1984) pointed out that communication problems of the middle elementary child with LD are subtle and children with LD do not overcome communication disorders through the maturation and will require language screening, evaluation, and intervention programs (In Gibbs and Cooper, 1989).

Gibbs and Cooper (1989) investigated the prevalence of communication disorders in a population of 242 children who are classified as LD and placed in self contained LD class in Alabama. Students with LD were 178 males and 64 females. Their age ranged from 8 to12 years. The subjects mean IQ score was 93 and the standard deviation was 11.24. The IQ score measured using either Wechsler Intelligence Scale for Children –Revised (WISC-R) (Weschler, 1974) or Stanford-Binet Intelligence Scale which had been administered by school for placement purposes. The assessment of the students' communication skills was completed individually. Articulation, language, fluency, voice and hearing measures were obtained for each participant. The Sentences Screening subtests of the Test of Minimal Articulation competence (T-MAC) for articulation assessment, the Test of Language Development for language assessment were used in the study.

The researchers reported that a speech, language, and/or hearing problem were exhibited by 96.2 percent (233) of the 242 children studied. They further noted that language deficits were found in 90.5 percent, articulation deficits in 23.5 percent, voice disorders in 12 percent, and fluency disorders in 1.2 percent of the students with learning disabilities. Though 96.2 percent of the children with LD exhibited some type of communication deficit, only 6 percent of the children were reported to be receiving speech and language services. The prevalence of

communication disorders in the population of LD was not found to be age or gender related (Gibbs & Cooper, 1989). This study added valuable information to the line of research in communication disorders in relation to the expected prevalence of articulation and voice disorders among children with LD. The results also re-establish the need for the treatment of communication disorders in children with LD.

Similar to students with EBD, students with learning disabilities may lack basic social skills or they may have knowledge of social skill strategies but fail to generalize them for a variety of reasons. Ellis (1989) indicated that some adolescents may avoid the risk of being humiliated for giving an inept answer and choose not to respond. The social dimension of LD has become a well-studied facet of the LD domain. Research evidence demonstrated that individuals with LD were at greater risk for social skill deficits than non-disabled peers (Bryan & Bryan, 1990; LaGreca & Vaughn, 1992).

Lapadat (1991) analyzed the results of 33 studies that have investigated the language skills of students with language disorders and learning disabilities. Results indicated that students' difficulty with using sufficient cohesion to communicate intention led to problems that involved misunderstandings, confusion, and incomplete discourse (Lapadat, 1991).

Appropriate sense of humor is one aspect of social perception and it is reported to be deficient in individuals with learning disabilities (Pickering, Pickering & Buchanan, 1987). As proposed by Donahue and Bryan (1984), there is a strong relationship between the knowledge and use of slang by adolescents with learning disabilities and their amount of interaction with and acceptance from the normal peer group. Their misunderstanding of metaphors, jokes, puns, and sarcastic remarks and their inadequate skills for rapid humorous verbal exchange place older

students with language disorders at a disadvantage when interacting with their peers. As a result, students with learning disabilities experience difficulties in establishing and maintaining friendships and enhancing self-esteem (Larson and McKinley, 1995).

Pickering et al. (1987) examined the cartoon humor comprehension of 30 boys with learning disabilities and non-learning disabled boys in two age groups: 8 and 12 years olds. In addition, they studied the relationship between the subjects' humor comprehension and their appreciation of humor. The findings of the study indicated a lag in learning disabled children's development of humor. Twelve-year-old LD boys were more like 8-year-old normal boys in their development of humor. In addition the humor form, developmental level and learning differences are reported to play important roles in students' comprehension and appreciation of humor.

Comprehension deficits during adolescence are often marked by less understanding of the figurative uses of language when students are matched with same-age peers (Blackwell, Engen, Fischgrund, and Zarcadoolas, 1978; Jones and Stone, 1989; Nippold, 1991). Jones and Stone (1989) reported that late adolescent males (16 to 18years of age) with learning disabilities provide significantly fewer correct metaphor interpretations than do normally achieving peers. Even after instruction has raised students' levels of literal language comprehension to within normal limits, individuals with histories of language disorders may demonstrate significant deficits in metaphor comprehension ability (Nippold & Fey, 1983).

In Donahue, Pearl, & Bryan (1980), learning disabled children were found to have difficulty understanding the conversational rules for repairing communicative breakdowns. In their study, learning disabled and non-disabled children in grades one through eight played the role of listeners in a referential communication task requiring them to choose the correct picture

from among four drawings which differed in terms of binary features. Results indicated that although all children were able to choose the correct picture after hearing the informative clues, developmental and group differences emerged on the two types of inadequate messages. Younger children and learning disabled children were less likely than their comparison groups to request clarification of the partially informative and uninformative messages, and consequently, they were less able to choose the correct referent on those trials (Donahue et al., 1980).

Thus, these findings seem to indicate a specific conversational deficit in that some learning disabled children can recognize inadequate messages and have the syntactic semantic ability to formulate questions; but may still fail to understand what their role as listeners entails. They may not realize that a successful conversational exchange depends upon a shared rule which obligates listeners to indicate to their partners when a communicative breakdown has occurred. The failure to acquire this rule leads the learning disabled children to assume a less active and, therefore, less cooperative role in the conversation.

Donahue (1982) studied question forming skills with 51 subjects defined as learning disabled (33 males, 18 females), who also were rated by their teachers as having difficulty in reading, paying attention, acquiring verbal skills, and/or following directions, and whose reading level on achievement tests fell below the fortieth percentile for their grade. Control subjects were 51 classmates (32 males, 19 females) who received average or above average teacher ratings and reading achievement scores above the sixtieth percentile. These children were randomly selected from among classmates who matched the learning disableb3d group on the variables of school attended, age, and sex. Children assigned to the intervention condition played two trials of the Twenty Questions game, using an array of 35 pictures of common objects and animals. Each

child's task was to figure out which picture the experimenter was thinking of by asking her yes/ no questions. None of the children had any difficulty naming the items, understanding the game rules, or formulating questions. In order to insure that all children experienced success on the task, those children who had not solved the problem after asking 20 questions were told that their twentieth guess was correct. Immediately after each condition, all children participated in a posttest using the referential communication procedure described above, although with different sets of pictures (Donahue et al., 1982).

These data replicate the findings of Donahue et al. (1980), that learning disabled children differ from non-disabled children in their responses to ambiguous messages provided by adults. Although learning disabled children had no difficulty selecting the correct referent on the basis of the fully informative descriptions, they were less likely than non-disabled subjects to ask for more information about the inadequate messages and, therefore, were less able to identify the correct pictures on these trials.

Bunce (1989) trained subjects with LD to provide specific information needed by listener, to complete a particular task, to generalize their newly learned skills to a different referential communication task, and to retain most of their skills when a follow-up check was completed seven months later. She concluded that students with learning disabilities can benefit from training on referential communication tasks.

Production deficits during adolescence may be evident in grammatical sentences (Wiig & Semel, 1975), sentences of shorter length (Donahue, Peral, & Bryan, 1982; Wiig & Semel, 1975), sentences with insufficient cohesion (Lapadat, 1991), and sentences that are less syntactically complex than those of normal peers (Donahue et al., 1982). Word-retrieval

problems, the inability to call up an intended word from memory, are common (Blalock, 1981; Wiig & Becker-Caplan, 1984; Wiig & Semel, 1975). Wiig and Semel (1975) noted longer response lags in producing sentences.

Loban (1976) compared two groups of children (high language skills group versus low language skills group) on their oral language production. The researcher determined that subjects in less effective group did not show any evidence of having a plan for their talking that showed coherence and unity. Their vocabulary was insubstantial and they were not flexible in expressing their ideas. In addition, the less effective group was reported to be speaking in a hesitant, doubtful, and /or labored style.

Asking questions is indicated to be another difficulty that adolescents with language learning disorders experience (Bryan, Donahue, & Pearl, 1981). Donahue (1984) found that teaching students to ask questions did not improve their use of questions when clarification was needed; students need to be taught how and when to ask for appropriate clarification. In addition, adolescents with language disorders often have problems expressing themselves concisely, and they tend to overuse a limited and concrete vocabulary (Wiig & Semel, 1976).

Production deficits during conversational speech may include a lack of sustaining and monitoring conversations (Bryan et al., 1981); a lack of requesting clarification of inadequate or ambiguous messages (Donahue et al., 1980); an inability to keep abreast of the verbal exchange (Donahue and Bryan, 1984); and a lack of arguing for or against a position (Bryan et al., 1981). No significant differences have been found between normal adolescents and those with learning disabilities regarding the number of conversational turns (Bryan et al., 1981), the number of

times they engaged in conversations with peers, or the number of times they were targets of peer initiation (Schumaker, Sheldon-Wildgen, & Sherman, 1980).

Schumaker and Hazel (1984) reported that students with learning disabilities who are in the speaker role are less likely to adapt their behaviors to meet the needs of their listeners and exhibit a lower occurrence of appropriate verbal/nonverbal skills than their non-disabled peers. Bergman (1987) noted that adolescents with language –learning disabilities, typically are not adaptive to their listeners and rarely express support, compliment them, or consider the feelings of others. Some evidence suggests that youth with language impairments produce fewer spontaneous requests for clarification than their normal peers (Donahue, 1984; Donahue et al.,, 1980). Following an intervention in making clarification requests, Donahue (1984) reported that the students with learning disabilities perform less well than their peers.

Adolescents with LLD often have difficulty with referential communication. During referential communication tasks, oral descriptions of an item or activity by adolescents with learning disabilities tend to be less informative for listeners than those provided by normal adolescents (Knight-Arest, 1984; Spekman, 1981). Knight-Arest (1984) found that boys with learning disabilities talked more but conveyed less information than their normal peers. They were reported to be more comfortable when doing than when describing a task to a listener. It was further suggested that they were less effective at adapting messages to the needs of the listener than their normally achieving peers (e.g., repeating rather than reformulating what they said), and appeared to be inattentive to the listener's needs. Comparative studies have reported differences in syntactic performance in children with learning disabilities appeared to use syntactically simple forms with more frequency than syntactic forms (Donahue, 1984).

Metalinguistic development is characterized by intuitive use of linguistic knowledge in tasks that require awareness, and automatic use of the knowledge (Menyuk, 1991). Kamhi (1987) summarized research that has examined the meta-abilities in language impaired children across six areas: repairing communicative breakdowns; making listener judgments; making judgments of language content; analyzing language into linguistic units; understanding and producing rhymes, and riddles; and understanding and producing figurative language. Kamhi (1987) in a synthesis of studies concluded that meta-linguistic deficits exist in children with language disorders. For example, 9-to 14-year –old students with language impairments have been found to have more difficulty than language-age matched peers in identifying, revising, and justifying revisions of morphological errors, but they produce the same types of clarification requests.

Children with Identified Psychiatric Disorders

Communication and psychiatric disorders frequently exist as co-occurring conditions in children and adolescents. Children with identified psychiatric disorders have higher rates of language delays than their normally developing peers (Warr-Leeper et al., 1994). Warr-Leeper et al., (1994) investigated the language abilities of 20 boys aged 10 to 13 ½ years who were admittbed to residential treatment because of their significant and persistent antisocial behaviors that had either oppositional /defiant disorder or conduct disorder as the primary diagnosis. Eighty percent of these boys carried the additional diagnosis of attention deficit hyperactivity disorder. The results of the study demonstrate that the majority of participants exhibited significant language disorders. Of the participants, 80 percent evidenced language disorders, which supports the previous research in the field showing language impairments in 71 to 89 percent of children

with behavioral disorders (Camarata et al., 1988). This figure was noted to be almost ten times higher than prevalence estimates in the general school population (Casby, 1989).

In their study, Baltaxe & Simons (1988) included nine case studies of children six to fifteen years old who had psychiatric disorders. They reported pragmatic deficits such as being relevant, sequencing events in time and differentiating old from new information. The results of their study indicated presence of moderate to severe language disorders in children with identified behavioral disorders. The language problems are appeared to be pervasive, including deficits in form, content, and function. (Baltaxe & Simons, 1988 as cited in Griffith et. al., 1997).

Children with communication disorders are also indicated to be at-risk for psychiatric disorders. Cantwell and Baker (1987) evaluated six hundred children with communication disorders for psychiatric and developmental disorders. As a result of their evaluation, these children are reported to be placed in three subgroups: those with “pure speech disorders”, those with “speech and language disorders”, and those with “pure language disorders”. It was reported that both behavioral and emotional disorders have significantly different prevalence rates in the three linguistic subgroups. The prevalence rate was the lowest in the pure speech disorder group and the highest in the pure language disorder group for both emotional and behavioral disorders. In addition, attention deficit disorder (ADD) and affective disorder were reported to be the only two diagnoses that had significantly different prevalence rates. The prevalence of these two groups of diagnosis was the lowest in the pure speech disorder group and highest in the pure language disorder group.

The results of the study indicated that children with both speech and language problems are less likely to have psychiatric and developmental disorders than children with only language

disorders. In summary, children with different types of speech and language disorders might be at different risk for psychiatric and developmental disorders. They further indicated the importance of recognizing that almost 50 percent of the children with communication disorders are likely to have a diagnosable psychiatric disorder and require some modifications (Cantwell & Baker, 1985).

Studies on Language Skills of Delinquent Youth

In juvenile detention centers, a disproportionate number of adolescents with communication disorders have been evident. Since the prison population is on the increase, there is a need to study the prevalence of communication disorders in delinquent youth (Larson and McKinley, 1995). The estimated prevalence of children and adolescent delinquency has been reported to be around 2 percent (Woolfender, Williams & Peat, 2002) and demands the implementation of preventive early intervention strategies. According to Schubert & Gates (1990) "Eighty-five percent of teenagers appearing in juvenile court are functionally illiterate, as are 79 percent of welfare dependence, 85 percent of drop outs, and 72 percent of the unemployed" (p.9). Taylor found (1969) that 84 percent of the delinquent youth she studied had communication disorders.

There has been research that summarized the primary theories of delinquency and other co-occurring conditions. In addition, studies investigated the major factors that my influence the existence and development of delinquency throughout the early/late adolescent years. No single risk factor is the indicator of these negative outcomes and /or delinquency. A better predictor is the co-occurrence of multiple risk factors, including familial, school, peer, and other environmental factors. Multiple factors may act cumulatively or may interact with each other.

In their study, Scaramella, Conger, Spoth and Simons (2002) stated that "delinquency refers to violations of the juvenile code such as theft, vandalism, or violence toward others (p.2.)." They reviewed and examined three theoretical perspectives to predicting the risk for delinquency during adolescence in order to have and present a clear view of the causes of juvenile crime. These discussions included approaches from following perspectives: in individual difference perspective (Gottfredson & Hirbschi, 1990; Moffitt, 1997), a social interaction perspective (Sampson & Laub, 1993; Simons, Johnson, Conger & Flder, 1998), and a social similarities contextual perspective. Scaramella et al., (2002) summarized these approaches in their similarities and contrasts including onset, maintenance and the other interacting factors.

They indicated that from an individual differences perspective, "stable, trait like characteristics develop during childhood and early adolescence and deviance into the adult years (p.1)." They further reported that while Gottfredson and Hirschi (1990) view trait like characteristics to be low self-control, from Moffitt's (1997) view, they were neuropsychological deficits such as impulsivity, low self-control, attention disorders, and cognitive impairments which increase the risk for oppositional , disruptive and hostile behaviors and may or may not result in legal violations (antisocial syndrome). Overall the importance of parenting behaviors was emphasized but the peer influence was not indicated to be an important factor.

On the other hand, from a social interact ional perspective, the interaction between specific environment such as family and peers play an important role in delinquency risk. They emphasized the influence of parenting behaviors suggest that "children generalize their antisocial behaviors from interactions with parents to interactions with peers" (p.4). The child is viewed as "an active seeker" of deviant peers. From a social contextual model parenting behaviors have a

more active role and directly influence attributes of the peer context. Based on the parental behaviors such as supportive, nurturing, encouragement of extracurricular activities and choice of peers, parents reduce the risk of delinquent behaviors in their children.

Scaramella et al., (2002), investigated the parents' influence on the risk for delinquent behaviors. They concluded that parenting behaviors and involvement were the strong indictors of later delinquency because they increase or decrease the antisocial behaviors at earlier ages. By reporting similar promising results in the 2002 study, Jackson reported that mentoring as an early intervention /prevention strategy influence the children' risk of delinquency behaviors by providing positive adult role model, a supportive and nurturing relationship. Following this intervention program, although positive influence was reported by parents as the decrease in both internal and external defiant behaviors, no change had been reported by teachers. There is a need for more systematic and controlled studies and programs using trained mentors in order to reach children who are at risk or delinquency and intervene at earlier ages by providing support and positive environments.

In a meta-analysis study, Woolfender, Williams and Peat (2002), reviewed related studies in order to determine the success of family and parenting interventions with children and adolescents with conduct disorders and delinquency. They described conduct disorder to be "a psychiatric disorder that manifests itself with repetitive and persistent patterns of antisocial behavior (p.1)" Conduct disorders and delinquency share familiar factors and suffer from same negative outcomes in life. The researchers concluded that the use of family and parenting interventions can help and result in decreased time spent in prisons and detention centers by juvenile delinquents. It was also reported that the rate of re-arrest and their subsequent arrests at

one to three years as significantly reduced. In conclusion, a comprehensive approach to reaching children and adolescents will include examining and interacting with students beyond academics and focusing on factors from various perspectives in order to identify and serve the individuals in our schools to prevent delinquency and save many lives.

Zabel and Nigro (1999) interviewed 266 juvenile offenders between the ages of 12 and 18 and investigated their personal, family and school characteristics and experiences. In addition they compared the similarities and differences of those who received and did not receive special education services in order to understand the risk factors involved. A high proportion of juvenile offenders (37.1%) was reported to be in special education and was classified as BD, LD or both. The responses of the juvenile offenders were found to be supporting the previously indicated risk factors including personal, family and environmental factors. While some similarities between the special education and non special education group were present, some differences in risk factors were also reported. “Juvenile offenders with a special education history were more likely to be male, to have a diagnosis of ADHD, to take medication for emotional problems including ADHD, to need corrective lenses, and to need foster care. They were also indicated to be in trouble at younger age and have attended more schools (p. 32)”. They reported their school experiences to be characterized with a high rate of suspension (88.6 %), assaulting a school officer, and dropout. The juvenile offenders indicated that they liked both their teachers and going to school.

Cole, Chan and Lytton (1989) compared 30 male juvenile offenders, to 90, 8-10 grade high achievers, low achievers and students with behavioral problems on their perceived competence. Four different domains of perceived competence were tested: namely cognitive

competence, social competence, physical competence and general self worth. Juvenile offenders are reported to have a lower cognitive social and self worth confidence than the other three groups. They were reported to differ significantly from students with BD on the social and self-worth competence but not on the physical and cognitive competence.

The communication skills of the delinquent youth have been a recently investigated issue. In their discussion on communication and violence, Sanger, Moore-Brown and Alt (2000) indicated that the conversational interaction of the teenagers might be an indicator of potential violent behavior. In a summary of research, they emphasized three areas of concern that require multi disciplinary team work in order to meet the individual needs of teenagers and prevent destructive violent behaviors. These concerns were structural and pragmatic skills, awareness of pragmatic practices of delinquent girls, and communication patterns among delinquent teenagers (Sanger et al., 2000). In their 1997 study, Sanger, Hux, and Belau investigated the oral language skills of female juvenile delinquents. Their findings indicated that although they were not identified as having speech and language impairments, female juvenile delinquents found to have poorer language skills than their peers (p.74). In conclusion, the importance of preventive and early intervention strategies and meeting the individual needs of students in both regular and alternative settings has been emphasized on more time.

Children who experience difficulty with language tasks that require the use of explicit, precise language in complex sentences and paragraphs frequently exhibit academic difficulties (Gregg, 1991). Young people who fall short of expectations have communication problems that put them at risk academically, socially and vocationally (Larson & McKinley, 1995). As the student becomes older, there is an interaction between oral and written communication. It

appears that oral communication can enhance written communication skills and vice versa. Students with oral language disorders almost always display written language deficits (Larson, & McKinley, 1995; Snow, 1983). Children who exhibit speech and language impairments experience reading problems and often have concomitant writing disorders.

Studies on Written Language

There is enormous evidence in the field emphasizing that older school age children do not "grow out" their language deficits. They display a continuum of failure that negatively impacts their performance in academic and social settings. Deficit in cognition, meta-linguistics, language comprehension and production, discourse, nonverbal communication, and written language may all contribute to the failure. When cognitive, meta-linguistics, linguistic, and, nonlinguistic expectations are not met, concomitant problems arise.

According to Stewart (1991), the complex task of writing involves three major stages: planning, translating, and reviewing. These stages are equivalent to the planning, sentence generation, and revising stages noted by Hayes and Flower (1987). Research and discussion concerning the written expression of learners with disabilities generally focused on spelling and handwriting (Keefe, Davis, & Andrews-Beck, 1997). The increased need and desire to improve the outcome of general education also increased the interest in academic skills of students with disabilities that broadened to include emphasis on composition.

Larson and McKinley (1995) indicated that older children with language learning disabilities demonstrate insufficient skills in writing. Problems with their writing skills are reported to be in "consistently and/or efficiently processing information obtained through reading and in generating written language that conveys their messages" (p. 79). The writings of

inexperienced writers are significantly shorter with fewer words per sentence (Hayes & Flower, 1987). Students with LD have difficulty with editing (Gregg, 1983). Stewart has noted that those who are poor writers tend not to plan but just begin writing; dwell on mechanical concerns such as spelling, and punctuation, which stifles their writing process; and frequently do not see their own errors and revise passages appropriately (Larson & McKinley, 1995). Englert and Raphael (1988) reviewed research studies in writing. They reported that the writing deficits of students who have disabilities and are considered to be poor writers include 1) less time spent on writing, 2) less success in using strategies to generate ideas and activate their prior knowledge for writing, 3) difficulty in organizing text, 4) lack of meta-cognitive controls, such as failing to monitor or correct, and 5) more dependence on external sources such as teachers.

More specifically, following a review of research of the literature, Graham, et al., (1991) reported similar findings concerning the writing of students with learning disabilities. They indicated that the writing of students with LD include transcription errors along with poor organization, impoverished ideas, missing elements, and lack of effective strategies and processes to plan, organize and revise.

Gillam and Johnston (1992) compared the written and spoken narratives of 9-to 12-year-old children who were language and learning disabled with three groups matched for age, or spoken language, or reading. They found that spoken narratives were superior to written narratives in the organization of textual form for all groups. On the contrary, written narratives were superior to spoken narratives in the organization of textual content. Sentences were longer in spoken narratives but not necessarily more complex. The group with language learning disorders in particular performed worse on a measure of complex sentence usage. They also

produced a large percentage of grammatically unacceptable sentences, especially in their written narratives, making errors on both simple and complex sentences.

Resta and Eliot (1994) administered Bender's Visual-motor Gestalt test to 32 boys, ages between 8 to 13 years who are identified as having ADD or ADHD. They reported that children with ADHD produced significantly more errors on Bender-Gestalt, and both groups with attention deficits had lower scores on most of the written language subtests. They reported that the results provide evidence those children with ADHD experience significant difficulties in their writing, copying and composition.

Discipline Issues and Procedures in Schools

Children may react to schools with appropriate or disruptive behavior. While much of disruptive behavior often originates from antisocial tendencies rooted deep within the home and society, they may well be precipitated by a number of school practices: inappropriate curriculum, ineffective teacher-student relations, and lack of sensitivity to diversity, school failure, and insufficient support services (Barr & Parrett, 2001). Barr and Parrett (2001) continued the discussion that there are various reasons for students' reactions such as their failures in school, to teachers' negative perceptions, and to a curriculum that seems irrelevant to their needs and they react by not attending school, or, if they come to school by waging war against the teachers and schools.

Since the 1997 reauthorization of the Individubals with Disabilities Education Act (IDEA), school violence and discipline issues became the focus of discussion in the field (Conroy & Davis, 2000). All schools, school districts, and states have a code of conduct for their students. Violation of these codes result in consequences which might be administered at either

classroom or school level. These consequences vary based on the increasing severity for more significant violations under the educational code or policy of a district. The goal of the discipline code is "to shape students' behaviors, encouraging them to learn appropriate behaviors that allow them and those around them to learn" (Moore-Brown & Montgomery, 2001, p. 251).

The implementation of the consequences, following serious violations of discipline code generally include two types of removals of a student from school; suspension and expulsion. Suspension is the removal of a student from a classroom or a school for a limited period of time, usually 1-5 days. Expulsion, on the other hand, refers to removal from the educational programs of a school district for a length of time, usually 2 semesters or longer, and is imposed by a school board or other governing body (Moore-Brown & Montgomery, p.251). Although most schools throughout the country have developed more effective discipline policies and procedures, schools continue to use expulsion as primary punitive reaction to absenteeism or to inappropriate or disruptive behavior.

Existing research has noted a dramatic increase in the use of exclusions and expulsions as a final disciplinary measure which has not been [producing positive outcomes. In most cases, studentbs with disabilities are caught often "in the web of zero-tolerance" (Morrison & D'Incau, 2000). In fact, the increase in dramatic violent incidents in public schools during the 1990s led to the enactment of 'zero tolerance' policies and laws nationwide. Unfortunately, as 'zero tolerance' policies have been implemented and evaluated, they have been proven to generate disturbing new problems for schools and communities. Expulsion of students from schools does not resolve the problems but delays the intervention until it is neither a positive nor constructive solution that disturbs the community severely.

A statewide study in Colorado investigated the effects of 'zero tolerance' policies. This study included approximately 1,500 students who were expelled in one year discovered that once students are out of school, they are unsupervised in the home and community. It was also reported that a large percentage of these youths quickly find themselves in trouble with the law and/or in jail within a year after expulsion (Colorado Foundation for Families & Children, 1995). The effects on students from the practice of school expulsion have been carefully studied and reported to be extremely negative. Expelled students typically fall further behind, experience increased social difficulties, and seldom return to school.

Some other negative outcomes of expulsion have also been reported to be encouraging a variety of negative activities such as dropping out, teenage pregnancy, drug and alcohol abuse, and crime. Nationally, 44 percent of African-American dropouts, 31 percent of Hispanic dropouts and 26 percent of Caucasian dropouts were to have been suspended or put on probation at least once prior to leaving school (Wheelock, 1986). There is a new focus in the literature that strongly claim that expulsion can be almost totally eliminated by involving students, parents, teachers, and administrators in establishing rules and by developing a careful due process procedure that protects the individual's rights (Gathercoal, 1999). What has not been examined in the extent literature is the extent to which the expulsion offense is predictable and therefore preventable. In order to be able to prevent serious disciplinary actions it is necessary to identify children who are at-risk for both EBD and academic failure because they interact and lead to more serious consequences at later ages.

Identification and Intervention Issues

Identification and assessment of students with co-occurring disabilities can be challenging (Fessler et al., 1991; Forness, Kavale, & Lopez, 1993). Severe behavioral problems may prevent the child's specific learning needs from being accurately identified (Fessler et al., 1991). Although research has demonstrated the presence of a strong correlation between developmental/disability related (internal) and environmental (external) risk factors and the development of behavioral disorders in young children, there are still few intervention programs that directly address many of these risk factors and the prevention of behavioral problems beginning in preschool and elementary –aged children (Del'Homme et al., 1996).

Social and economic disadvantage, parenting behavior, and early oppositional behaviors have been reported as some of the major risk factors related to later conduct disorders (Kazdin, 1987). Forness, Kavale, King, and Kasari (1994) have suggested that early classroom signs and symptoms of a wide variety of disorders such as (ADHD), depression , anxiety disorders, and even schizophrenia are likely to be mistaken for discipline or conduct problems and do not receive appropriate recognition or intervention. School experiences of these children such as school adjustment problems including peer- teacher interaction have been reported to be correlating with predictors that put children at risk (Kazdin, 1985). These potential risk factors need to be addressed prior to the existence of behavioral problems and preventive/remedial intervention practices need to be in place.

Recently, the early identification of children at risk for the development of conduct disorders has received a notable attention in the field (Wehby, Dodge, & Valente, 1993). Patterns of antisocial behaviors are often formed in early social development (Reid & Patterson, 1991)

and when they are exhibited at early age they are often predictive of social maladjustment later in life (Patterson, Capaldi, & Bank, 1991). The presence of these behaviors at school age may lead to referral for special education services in the area of serious emotional disturbance (Kauffman, 1989; Duncan, Forness & Hartsough, 1995; Epstein, Cullinan, Quinn & Cumbald, 1994; Landrum, Singh, Nemis, Ellis & Best, 1995), referral for school –based counseling and being suspended from school (Ruhl & Hughes, 1985). This problem is reflected in the fact that students with emotional and behavioral disturbances are under identified in the school system. This under identification may be a direct result of the exclusion clause in the federal definition of SED in which socially maladjusted children are ineligible for SED criteria unless it is determined that they are also SED (Forness et al., 1993; Forness & Knitzer 1992).

Wehby et al., (1993) investigated the school behaviors of first grade students who were identified at either high- or low-risk for conduct disorders by observing their interaction with both their peers and teachers one year after initial identification. They used three gates assessment procedures to identify high-risk students at kindergarten level. The first gate was the identification of schools with known high rates of school dropout and behavior problems; the second gate was teacher evaluation of child behavior; and the third gate was maternal report of behavior at home. Students were identified at either high risk or low risk based on the process. Each child was observed for the total of two hours during the last two months of first grade. The analysis of the student- teacher interaction indicated that the high-risk group received significantly more negative commands from teachers during both structured and unstructured activities. No significant difference was reported in relation to the number of interactions both groups had with their peers. While no significant difference was found in the rate of aggression

observed between the two groups, the high –risk group exhibited twice the rate of target-initiated aggression during structured time. They also received higher rates of peer-initiated aggression during unstructured activities, engaged in twice as many disruptive acts and demonstrated poorer in authority acceptance.

These findings of the study supported the notion that high- risk students show differences in their rates of problem behaviors at the first grade level. The researchers further suggest that early identification of problematic behaviors at these initial stages of development may prove to be effective in meeting the special needs of children with behavioral problems (Wehby et al., 1993).

Forness et al., (1996) suggest that the present identification and intervention system is reactive, and the lack of proactive intervention practices is a great concern. Opportunities for prevention are thus either lost or delayed. Many if not most, children with emotional or behavioral disorders do not seem to receive appropriate services until their late elementary years; and very few appear to receive systematic pre-referral services for their emotional or behavioral problems in early childhood. Existing programs in this area tend to be more reactive in their referral process than proactive. In other words, they seem to respond to children during the point of formal identification and referral for special education rather than during the very first sign of trouble. Studies that examine the indicators of early behavioral problems are very critical to reaching students at-risk as early as possible in order to prevent the acceleration of these behavioral problems.

In relation to students with co-occurring learning and emotional disabilities, researchers indicated concerns that the identification of co-occurring disability and the individual learning

needs were not identified at the time of assessment possibly due to severe behavioral problems (Fessler et al., 1991; Javorsky, 1995). Javorsky reported that 23 percent of the children in psychiatric placements who were identified with learning disabilities received special education services to address their learning disabilities, 14 percent received services for emotional disturbance, and only 6 percent received services for both learning and emotional disabilities. Children with disruptive disorders were more likely than children with affective disorders to be identified with learning disabilities. These identification and assessment issues may also impede the access to appropriate services for students with co-occurring disabilities (U.S. Department of Education, 2000). Gibbs and Cooper (1989) reported that only 6 percent of students with learning disabilities received speech/language services despite the fact that over 90 percent of them had communication disorders.

Assessment of speech language and communication impairment of children attending mental health and psychiatric settings should be inclusive. An inclusive assessment will allow the professionals in the field to identify the degree to which the exhibited problem is a manifestation of a specific developmental disorder, is associated with other psychiatric syndromes and physical conditions, or is symptomatic of more generalized emotional and relationship disturbances (Doherty & Hummel, 1990).

As indicated in outcome studies, young adults with EBD create a substantial cost to society through their involvement with welfare, public health, substance abuse, mental health, juvenile justice, and criminal justice services (NMHA, 1993). The peer relations of students with mild disabilities have gained recognition because of the relation between deficient interpersonal skills and (a) the need for later psychiatric treatment (Cowen et al., 1973) and (b)

aggression and juvenile delinquency (Carran et al., 1996). The social difficulties of children with disabilities have also led to support for social skill training of these students in school (Gresham, 1982). Appropriate special educational services must consider not only the cognitive/curricular aspects of school problems, but also any social-communicative factors that influence the overall well-being of the student.

Assessment of children with behavioral disorders has been studied in depth and effective strategies have been designed from a behavioral perspective. It is very critical to understand and plan intervention programs for children who are at-risk for behavioral disorders that meet their individual needs and address all components of their emotional/behavioral and academic well-being.

It is clear from this review that: (1) Students who exhibit challenging behaviors receive many labels (e.g. socially maladjusted, conduct disorders, EBD, LD, etc.), and they appear to share at least several similarities such as academic problems and communication delay or disorders (Dykman & Ackerman, 1993; Larson & McKinley, 1995; Sanger et al., 2000; Thompson & Kronenberger, 1990), (2) further research is needed to clarify the many relationships among the various categories of children who present challenging behaviors, (3) research investigating the role of language and communication skills is needed to understand, address, and ultimately prevent the development of challenging behaviors, (4) written language characteristics of students with challenging behaviors became a critical area for further research. In order to understand these overlapping difficulties, it is essential to assess behavioral, learning and language (both oral and written) skills of children with challenging behaviors.

CHAPTER 3

METHODOLOGY

The purpose of this chapter is to describe the procedures and methodology employed in the study. Sampling, instrumentation, data collection, and data analysis will be presented. Procedures were developed to achieve the primary purpose of the study: to determine the written language skills of middle and high school students who were attending an alternative program in one of the Orange County Department of Education (OCDE), alternative education sites in Orange County, California**.**

Population and Sample

OCDE provides services to the county's 27 school districts. The Division of Alternative Education supervises the Alternative, Community, and Correctional Education Schools and Services (ACCESS). There are approximately 8000 students enrolled who attend classes in 147 small school sites. Students range from grades K-12. Students who are referred to ACCESS education options by their districts are served in one of the following settings: County Community Schools, Community Day Schools and Orange County Community Schools (OCCS).b

In the County Community School option, the students attend either a minimum day or full day education schedule. In addition, contract learning is an option where students meet with teachers once a week and work independently on their assignments. In Community Day Schools, students are provided with 360 minutes a day of instruction. Students who are educated under this option are those who are expelled from their districts, under informal or formal probation, referred by social services, School Attendance Review Board (SARB), or requested placement in

these programs by parents and districts for other various reasons. In summary, most youths and adults are referred to ACCESS under one of the categories: youth who are referred by their districts, who are temporarily placed in group homes, who are on probation, who are homeless, who are also teen parents, who are incarcerated in local probation and sheriff-operated facilities, who are home schooled and adults who are incarcerated into county facilities (OCDE, ACCESS Focus on Learning, 2004).

Population

The target population of this study was defined as all middle and high school students who were attending an alternative education program in Southern California. From this population, the students who attended Chapman Principal Administrative Regions (PAR), one of the eleven OCDE, Alternative Education Regions, formed the accessible population**.**

Chapman region (PAR) serves students from the following districts: Garden Grove Unified School District, Buena Park School District, Cypress School District, Huntington Beach Union High School District, Fullerton School District and Fullerton Joint Union High School District, New Port- Mesa Unified School District, Anaheim City School District and Anaheim Union High School District, Westminster School District, Santa Ana Unified School District, Los Alamitos Unified School District, Fountain Valley School District, Ocean View School District and Orange Unified School District. Chapman region has an average daily attendance of approximately 1600 students.

From this accessible population, the researcher selected participants from both the list of the students who attend three learning centers and those who were enrolled in the program. In these three Learning Centers, students were given parent consent forms to take home. The

criteria for inclusion in the study was (1) enrollment into one of the Chapman region community schools, (2) having a referral reason that resulted under either Delinquency Prevention Program (DPP) (included Section 1981B, parent request) or Court Ordered Probation (COP) (included both mandatory and non-mandatory expulsion), and (3) not being identified as having a disability. Students who are referred by social services were not included in this study. The ACCESS/Chapman region data base houses all students' demographic and educational history. Students' behavioral history and the most current STAR math and reading scores were obtained from both their cumulative folders and the assessment center.

The STAR Reading and Math Assessment Program, a computerized assessment, (Renaissance Learning, Inc., 2002) has been accepted by the State of California as one of the alternative assessment tools for alternative education programs. This academic achievement assessment data were the only available academic achievement data. All participants haven't taken the STAR assessment. The following demographic data was collected for all participants who met the criteria for inclusion in the study: Age, gender, ethnicity, grade level, the last district attended, number of credits earned, attendance history, whether or not a student has a disability or not, and the number of the suspensions.

Sampling

For the purpose of this study, a stratified sampling method was used. Stratified sampling involves selecting a sample so that certain subgroups in the population are adequately represented in the sample. This type of sampling ensures that a satisfactory representation of students from various ethnicity groups is included in the sample. A proportional stratified sampling method was used. In this sampling procedure, the proportion of each subgroup in the

sample is the same as their proportion in the population (Gall, Borg, & Gall, 1996). For the purpose of this study, the ethnicity and gender of the participants were included in the sampling procedures, each ethnicity and gender being a separate "stratum."

In determining the number of the participants in each group based on ethnicity and gender distribution, the researcher reviewed both Orange County and ACCESS gender and ethnicity distribution. The initially proposed sample size of each group was 60 participants, however during the sampling and obtaining parent and student consent for the inclusion to the study, this number was increased to 114 participants in group DPP and to 84 participants in group COP. The following table (Table 1) includes the ethnicity distribution of youth in both Orange County and ACCESS.

Table 1

The Ethnicity Distribution of Youth in Orange County, ACCESS and Present Study

Ethnicity	Orange County %	ACCESS %	Initially Proposed %
Hispanic	42	48	41
Non-Hispanic White	40	37	41
Asian b	12	5	12
Other	4	7	7
African American	2	3	8
Total	100	100	100

Note. The corresponding numbers to % were not available to report.

For various reasons, the ethnicity distribution of the participants who participated in this study resulted in larger percentage of Hispanic students. The response rate to the consent forms was higher for the Hispanic population while Caucasian participants needed follow-up phone calls and reminders. In addition, because of this high return by Hispanic participants and the administration of TOWL-3 to all participants with consent forms resulted in more Hispanic participants being tested.

The gender distribution for ACCESS was reported to be fifty-eight percent male and forty-two percent female. An increase, during the recent years, in the number of the female participants in ACCESS institutions was also reported. For this study, the gender distribution was proposed as twenty percent female and eighty percent male.

Instrumentation and Data Collection

An information recording form and the Test of Written Language –3 (TOWL-3) were the two instruments that were used in this study. The TOWL-3, developed and revised by Hammill and Larsen in 1996, was the main instrument used for data collection. The data containing those variables that are addressed in the questions of the study were obtained from the ACCESS database. These explanatory variables were categorized as: 1) student demographics (gender, age, ethnicity, SES) 2) behavioral history (number of suspensions) 3) attendance (whether or not the student was truant) 4) language designation (English Only (EO), Limited English Proficiency (LEP) or Identified Fluent English Proficiency (IFEP) 5) academic performance as measured by STAR reading and math computerized tests.

The Test of Written Language -3 (TOWL-3)

The TOWL-3 is a norm-referenced written language test that previously has been used for both clinical and research purposes**.** The TOWL-3 is indicated to be appropriate for ages 7 years 6 months through 17 years 11 months and can be administered to either individuals or small groups (Hammill & Larsen, 1996). With the exception of the 15 minutes time allocated to story writing, the TOWL-3 has no set time limits. The administration of the test takes approximately 1 hour.

The administration of TOWL-3 included students' spontaneously written story about a "Prehistoric" picture followed by their responses to the next five contrived subtests. The TOWL-3 consists of eight subtests that measure a students' writing competency through both essay-analysis (spontaneous) formats and traditional test (contrived) formats. The TOWL-3 includes the following contrived subtests:

1. The Vocabulary subtest measures word usage in 28 items. Participants were asked to write a sentence with the word that was provided in that test item.
2. The Spelling subtest measures ability to form letters into words and has 18 items. In this subtest, the participants were required to write the sentence that orally presented by the researcher.
3. The Style subtest measures punctuation and capitalization which are scored using the same 18 items from the spelling subtest.
4. The Logical Sentence subtest measures ability to write conceptually sound sentences in 22 items. The participants were asked to read the sentences presented in their

student response booklet and correct each sentence that it makes perfect sense by writing the correct word on the crossed out word.

5. The Sentence combining subtest measures syntax in 20 items. The participants were asked to read the sentences provided in the items, combine them into one sentence and write the in their booklet.

The following 3 subtests were scored by analyzing the quality of the written story. The TOWL-3, scoring procedures provides the criteria for scoring the following spontaneous formats. To earn credit the students' writing sample should meet the indicated criteria.
The following are the three subtests of spontaneous formats:

1. The Contextual Conventions subtest measures capitalization, punctuation, and spelling.
2. The Contextual Language subtest measures vocabulary, syntax and grammar.
3. The Story Construction subtest measures plot, character development, and general composition.

The TOWL-3 was standardized on a 26-state sample of more than 2000 public and private school students in grades 2 through 12. The statistical characteristics of TOWL-3 were indicated to be: unbiased relative to gender and race and included a representative normative sample relative to gender, race, social class and disability. In addition, the internal consistency, test retest with equivalent forms anb3d inter scorer reliability coefficients are reported to be .80 at most ages. The possible range of raw scores for each subtest varied for each subtest with the widest range being 0 to 29. It was also reported that the three-parameter item response theory

approach and the Delta score approach were applied in order to check the item bias. The findings indicated that, TOWL-3 items contain little or no bias for the groups studied.

The administration of the test for all subtests begins with item 1 and continues until a ceiling is achieved or until the final item is administered. The ceiling occurs when the student misses three consecutive items. All items above the ceiling are scored as incorrect. Correct responses are scored as "1" while the incorrect items marked as "0" in the student booklet.

All points were added for the raw score, which is the total number of correct responses and recorded in the Scoring Form. The raw scores were transformed into percentiles and standard scores as determined by the age of the person tested. The standard scores for the subtests were assigned to the constructs they represent. The results of several subtests were combined to produce each composite score. These composite scores are Contrived Writing and Overall Writing. The standard scores were converted into percentile rank and quotients which were used in the analysis.

Participants' academic achievement performance was measured by their STAR Reading and Math Test scores which were administered at either assessment center or the site they attended. STAR Reading-R is an individually administered, a computer-adaptive reading test and database. It is used for grades 1-12 and was published in 1996 by Renaissance Learning Inc. It has been revised in 2002. The primary purposes of this test are to provide teachers with estimates of students' instructional reading levels, to place reading level estimates relative to national norms, and to provide a metric of growth in reading ability across academic year (Nebelsick- Gullett, 2003). It was reported that this test was normed using a sample of 29.627 students. It was further added that analysis of norming data by ethnicity and gender showed

slightly higher scores for females and a tendency for minority students to score .5-1 standard deviation lower than non-minority students. Alternative forms reliability estimates also were reported for two studies (2000 student sample size). Reliability estimates reported to be ranging from .79 to 91 across grade levels with an overall value of .94. In the review of the test by Buros (2004), in addition to usefulness of this test to teacher use in the classroom, it was also indicated not to be used in isolation. It was also pointed out that it limits the type of the reading skills that can be sampled, lessening the diagnostic utility of its measure (Waterman, 2004).

The similar review was reported for the STAR Math-R. STAR Math is also a computer-adaptive test and database which has two major parts; each has 12 multiple choice type items. The following strands are covered under two parts: numeration concepts and computation items. The second part includes items related to word problems, estimation, statistics, charts, graphs, geometry, measurements and algebra. STAR Math has been normed with a sample size of 25,800 students from 252 schools representing 42 states. This norming also reported to consider data on gender and ethnic groups. Test-retest reliability coefficients reported to range from the mid .70s to mid .80s. It was also correlated with scores on the standardized tests such as California Achievement Test, California Test of Basic Skills, the Iowa Test of Basic Skills, and Stanford Achievement Test. The resulting validity coefficients ranged from a low of .60 to a high of .88.Ciechalski (2004), in his review, indicated that STAR math is a well –designed instrument that provides a quick estimate of the students math ability in grades 3-12. He added that the norms and reliability of the test is adequate but states the need for ongoing validity studies.

Data Collection

Following the written permission for the study to be conducted in OCDE, the researcher collected the data at Chapman region enrollment office and three community school sites: Magnolia Lyceum, Mesa Learning Center and Buena Park Learning Center. The list of the students who attended these community schools were obtained from the enrollment office data base including the following information: name, gender, grade level, referral reason, enter date, last district attended and student birth date.

Positive parent and student consent forms explaining the purpose of the research were given to the parents at the enrollment office as part of the enrollment process in their native language. The consent forms state that the participation in the study is voluntary and provide assurance of anonymity. They also include the contact information for the researcher and the researcher's major advisor. The positive consent forms were translated to both Spanish and Vietnamese. Some of the newly enrolled students were tested at the enrollment office. In some cases, the researcher obtained the consent forms from both the parents and the students during enrollment but administered the test at a later date at the participants' schools.

In addition, the researcher sent out consent forms (See Appendixes D & E) to the parents of all students who attended the three Learning Centers. For the purpose of this study, the researcher included the participants who were under formal court probation, and expelled from their districts under the COP category, and the other mild behavioral or academic referrals under DPP such as low credit, parent request and disruptive behaviors. Throughout the study, only two parents declined permission for their child to participate in the study.

Data were collected during the spring semester of 2003/2004 school year, in both individual and small group settings by administering the TOWL-3 to the participants. The TOWL-3 was administered to all of the participants by the researcher in their schools or enrollment office. After the administration of TOWL, all participants were given two McDonald's dollar certificates. The students with disabilities who returned the signed consent forms were also given the McDonald's certificates but were redirected to different activities or taken out of the classroom by their teachers with various explanations.

Scoring of the TOWL-3 was completed by the researcher and a certified speech language therapist. The researcher and the speech language therapist met and reviewed the scoring procedures and scored five tests together for discussion and clarification of certain concepts in the test. The first twenty tests were scored independently and inter scorer agreement was determined to be 80 percent. The inter-scorer reliability was computed as the percentage of agreement on the independently scored test scores.

Data Analysis

Data collected in this study were analyzed using the SPSS statistical analysis program. The descriptive statistics including the demographic data are reported in the following chapter. The variables that measured on categorical (nominal or ordinal) levels are summarized using frequencies and percentages in categories. Variables measured on interval or higher scales of measurement are summarized using means and standard deviations. For subsequent analyses, the alpha value was set to be 0.05 for the statistical analysis and reporting of the results.

Data were analyzed using the following procedures for each respective study question.

1. How do participants in groups DPP and COP differ on selected personal, academic, and demographic variables?

   1A. Is there a significant difference between participants who are identified under the DPP category and those who were in the COP category on measures of written language skills as measured by TOWL -3 and academic achievement as measured by STAR math and reading scores? To describe the written language skills of participants in each group and to compare the groups, the TOWL-3 standard scores were analyzed using an independent t-test. In addition, STAR math and reading scores were analyzed using an independent t-test.

   1B. Are there significant relationships between written language skills and school sanctions for problem behavior for participants in group DPP and group COP? In order to answer this question, the TOWL-3 scores, and truant and non-truant responses were analyzed using t-test for both group DPP and COP. To investigate the relationship between TOWL-3 scores band the number of suspensions, Pearson Product correlation statistics were computed for both groups.

   1C. Is there a relationship between school sanctions for problem behavior and academic achievement of participants in group DPP and group COP? The truant and non-truant responses and academic achievement as measured by STAR math and reading scores were analyzed using t-test for each group. In order to conclude whether or not a relationship exists between

academic achievement and number of suspensions for each group, Pearson correlation statistics were computed.

1D. Is there a relationship between written language skills as measured by TOWL-3 and academic achievement as measured by STAR reading and math scores of the participants in both groups? In order to investigate a possible relationship between TOWL-3 scores and STAR math and reading scores, Pearson correlation statistics were computed for both group DPP and COP.

2. Do relationships exist between behavioral characteristics as measured by number of suspensions, written language abilitieb3s abs measured by TOWL-3, academic achievements measured by STAR math and reading scores and selected demographic characteristics (gender, ethnicity, language competency in English and being classified under group DPP or COP)? Multiple regression analysis was used to investigate relationships that might exist among variables. Three models of regression were built. The first model had TOWL-3 scores as the dependent variable, for the second model reading and for the third model math were dependent variables. The independent variables for all three models were ethnicity, gender, English language designation and participants' groups (DPP or COP).

CHAPTER 4

RESULTS

This chapter contains the findings of the investigation into the written language skills of middle and high school students attending one of the ACCESS alternative programs during the 2003-04 academic years. Following the limitations of this study, the first section of this chapter describes the participants of the study based on selected personal, academic and demographic characteristics. The subsequent section reports the findings of the study as arranged by questions of the study.

Descriptive Findings

This section summarizes the descriptive findings of this study in relation to participants' personal, academic and demographic characteristics including age, gender, ethnicity, English language designation, grade level, health, district origin, enrollment history, referral reasons, school sanctions (truancy and number of suspensions), and STAR reading and math scores. The accessible population of 198 participants was included in this study. There were 114 participants in group Delinquency Prevention Program (DPP) and 84 participants in group Court Ordered Probatiobn (COP).

Age and Gender Distribution of the Participants in Groups DPP and COP

Participants' chronological ages were computed by subtracting their birth date from the date of testing. The chronological age was converted in months and the total number of months for each group was divided by the number of the participants to obtain the mean age for the group. The mean age in months was divided by 12 in order to calculate the mean age in years and months. The average age for group DPP was found to be 15 years and 5 months (SD = 17. 0)

while participants in group COP were average 15 years and 8 months (SD =16.2) old. The age range for both groups was 13 years 1 month to 17 yeas 11 months.

As shown in Table 2, in group DPP, there were 38 (33.3%) females, while there were 76 males (66.7%). On the other hand, the number of the females was smaller in group COP (n=9, 10.7%) and a larger number of students were males (DPP, n=75, 89.3%). Table 2 provides a summary of the age and gender distribution of the participants in groups DPP and COP.

Table 2

Age and Gender Distribution of the Participants Enrolled in Alternative Education Programs

Groups	Age				
	DPP			COP	
	Mean	SD		Mean	SD
	Gender				
	n	%		n	%
Male	76	66.7		75	89.3
Female	38	33.3	b3	9	10.7
Total	114	100		84	100

Note: The age range in both groups was 13.1 to 17.11

Ethnic Origin of the Participants Enrolled in Alternative Education Programs

The overall ethnic distribution for both group DPP and COP is presented in Table 3. In group DPP, the participants' ethnic origin distribution was as follows: 56 Hispanics (49.1 %), 40 non Hispanic/White (35.1%), 13 Vietnamese (11.4%) and 5 African American (4.4%). In group

COP the number of Hispanic and Non-Hispanic White distribution were at a closer percentage: 34 Hispanics (40.5%), 31 Non-Hispanic White (36.9%), 13 Vietnamese (15.5%) and 6 African American (7.1%). This distribution is very representative of both Orange County and ACCESS youth ethnicity distribution which was presented in the sampling section of Chapter 3.

Table 3

Ethnicity Distribution of the Participants Enrolled in Alternative Education Programs

Groups	DPP		COP	
Ethnicity	n	%	n	%
Hispanic	56	49.1	34	40.5
Non-Hispanic White	40	35.1	31	36.9
Vietnamese	13	11.4	13	15.5
African b American	5	4.4	6	7.1
Total	114	100	84	100

English Language Designation of the Participants Enrolled in Alternative Programs

Students' English language designation was analyzed under three categories: English Only (EO), Limited English Proficiency (LEP) and Identified Fully English Proficient (IFEP) based on the information provided by their districts. As shown in Table 4, the language proficiency of the participants in group DPP and COP indicated a similar distribution except in the number of participants who were identified as Limited English Proficient.

In Group DPP, the number of LEP was 24 (21.01%) but this number was higher in group COP (N=50, 59.5%). A reverse distribution is present for the EO participants. In group DPP, 69 EO participants (60.5%) were present, while this number was much smaller in group COP (N=14, 16.7%). The language designations of the participants in both groups are presented in Table 4.

Table 4

Language Designation of the Participants Enrolled in Alternative Education Programs

Groups	DPP		COP	
Language Designation	n	%	n	%
EO	69	60.5	14	16.7
LEP	24	21.1	50	59.5
IFEP	21	18.4	20	23.8
Total	114	100	84	100

Note. EO= English only, LEP=Limited English Proficiency and IFEP= Identified Fully English Proficient.

Grade Level of the Participants Enrolled in Alternative Educational Programs

In both groups DPP and COP, the number of high school participants was higher than the middle school participants. This number was 79 (69.3%) for group DPP and 62 (73.8%) for group COP. The grade distribution of all participants is shown in Table 5.

Table 5

Grade Level Distribution of the Participants Enrolled in Alternative Education Programs

Group	DPP		COP	
Grade level	n	%	n	%
HS	79	69.3	62	73.8
MS	35	30.7	22	26.2
Total	114	100	84	100

Note. HS=High School, MS=Middle School

Presence of Medical Conditions in Participants Enrolled in Alternative Programs

During the collection of the demographic data, student health information was gathered from the participants' medical emergency cards. In both groups, only a very small number of participants' emergency cards were marked for a medical condition or medication that was taken daily. It was noted that only one participant had an Oppositional Conduct Disorder (OCD) diagnosis in addition to Attention Deficit Hyperactivity Disorder (ADHD). The health data for both groups are presented in Table 6.

Table 6

Presence of Any Medical Condition in Participants Enrolled in Alternative Education Programs

	DPP		COP	
Medical Condition	n	%	n	%
No medical condition	103	90.3	80	95.2
ADD/HD	5	4.4	2	2.4
Allergy	3	2.6	0	00.0
Depression	2	1.8	2	2.4
Diabetes	1	0.9	0	00.0
Total	114	100	84	100

Note. None of the students had more than one existing medical condition.
ADD/HD= Attention Deficit Disorder/Hyperactivity Disorder, only one of the students in this category had a co-existing oppositional Conduct Disorder (OCD).

District Origin of the Participants Enrolled in Alternative Education Programs

Participants in this study were originally students of eleven different districts in northwest Orange County, California. Considering the ethnic representation of these students, it can be concluded that the sample in this study was representative of Southern California population**.** The district distribution of these participants is shown in Table 7.

Table 7

District Distribution of the Participants Enrolled in Alternative Education Programs

Groups	DPP		COP	
District	n	%	n	%
Huntington Beach UHSD	26	22.8	14	16.7
Garden Grove USD	25	21.9	21	25.0
Buena Park SD	22	19.3	18	21.4
Other	18	15.8	11	13.0
Fullerton JUHSD	12	10.5	13	15.5
New Port/Mesa USD	11	9.7	7	8.4
Total	114	100	84	100

Note: "Other" category included students from Anaheim S.D., Orange S.D., Fontana S.D., LAUSD, Los Alamitos S.D. and Santa Ana S.D.

Table 8 included the five most represented districts' specific ethnicity distribution of the students to present an evidence of the sample in this study being a representative sample of southern California. Overall, it is possible to conclude that the Hispanic and non-Hispanic white population were the two dominant ethnicities in four out of five districts.

Table 8

Ethnicity Distribution of the Participants' Home Districts

Groups	GGUSD	HBUHSD	FJUHSD	BPSD	NMUSD
Ethnicity	%	%	%	%	%
Hispanic	51	18	48	56	39
Asian	29	24	19	17	5
Non-Hispanic White	18	50	29	20	54
African American	1	1	2	6	1
Other*	1	7**	0	1	1
Total	100	100	98***	100	100

Note. Districts with majority of students in alternative programs were included in the table.

GGUSD: Garden Grove Unified School District
HBUHSB: Huntington Beach Union High School District
FJUHSD: Fullerton Joint Union High School District
BPSD: Buena Park School District
NMUSD: Newport-Mesa Unified School District

* Includes Native American, Pacific Islander, Mixed Race or No Response
** In this category Native American students constitute the 6% of the population
*** The reported ethnicity distribution does not add up to 100%
Source. www.greatschools.net

Enrollment History of Participants Enrolled in Alternative Educational Programs

Participants of this study had a very diverse enrollment history at ACCESS programs. While some of the participants were in the program for the first time, others might be re-enrolled for the second or more times. Some participants may not be able to function in a regular

classroom after returning to their original districts and for various reasons they requested to come back (student and/or parent request) or were referred back to the program by their districts or court. Majority of the participants in group DPP were new to the program (n=90, 79.0%) while this number (n=45, 53.6%) was smaller in group COP. The number of participants who were re-enrolled for the second or more times was higher in group COP. The number of the participants and their enrollment history in ACCESS programs is presented in Table 9.

Table 9

Enrollment History of the Participants Enrolled in Alternative Education Programs

Enrollment Status	DPP		COP	
	n	%	n	%
New	90	79.0	45	53.6
Re-enrolled	21	18.4	29	34.5
More than 2 times	3	2.6	10	11.9
Total	114	100	84	100

Referral Reasons to Alternative Education Programs

Most of the participants in group COP were under formal probation. For the purpose of this study, only a small number of participants who were expelled from their districts were included under the COP group. In addition to being assigned to the DPP or COP, there were initial referral reasons that were used by districts in referring students to alternative programs. Most participants in group DPP had additional referral reasons, while those in group COP had

their primary referral reason as probation (P) and in some cases it was the only reason that was indicated in order to protect the confidentiality of the participants.

In Table 10, reasons for referral are summarized using frequencies and percentages for both groups. Almost 70 percent of the participants (n=79) in group DPP had truancy to be the only or one of the multiple referral reasons to alternative programs. This was followed by low credit which was used in 28 percent of the referrals (n=32). On the other hand, in group COP, 47.6 percent of the participants (n=40) had no reason indicated in addition to being under probation. For this group expulsion from school, mandatory or non-mandatory expulsion was the second most commonly used referral reason (n=25, 29.8%).

Table 10

Referral Reasons of the Participants to Alternative Programs

Groups	DPP		COP	
Referral Reason	n	%	n	%
Truancy	79	69.3	0	0
Low Credit	32	28.0	0	0
Inability to Function	21	18.4	0	0
Disruptive Behavior	16	14.0	9	10.7
Substance Abuse	4	3.5	5	6.0
NO Reason	0	0	40	47.6

(table continues)

Expulsion	0	0	25	29.8
Code 654[a]	0	0	6	7.1
Other[b]	N/A	N/A	26	31.0

Note. The percentage of these referral reasons does not add up to 100% because multiple referral reason might be indicated,

[a]Code 654: Preventative programs of supervision during any investigation that might be conducted by a probation officer or court (Gould's Penal Code Handbook of California, 2001).

[b]Other: Included parent request, low credit and inability to function and was combined and calculated under one category only for group COP because of the small number of their existence in this group.

Truancy Behaviors of the Students Enrolled in Alternative Programs

Table 11 shows the truancy characteristics of participants in both group DPP and COP. In group DPP, truancy was marked in the students' records indicating that they had been truant a sufficient number of times to be referred to an alternative program for 69.3 percent of the participants (n=79) while this number in group COP was smaller (n=36, 42.9%).

Table 11

Truancy Behaviors of the Students Enrolled in Alternative Programs

Groupsb	DPP		COP	
	n	%	n	%
Truancy				
Yes	79	69.3	36	42.9
No	35	30.7	48	57.1
Total	114	100	84	100

Number of Suspensions Reported for Participants Enrolled in Alternative Education Programs

The number of suspensions, the mean value and the standard deviation for each group is presented in Table 12. These data were collected as categorical data. Categories were created in order to manage and present the data in a meaningful manner. For each student, the number of student suspensions was marked under one category. In both groups DPP and COP, a large number of participants were suspended on or more times (Range 0-21). It was also shown that in the COP group, there were more occurrences of higher number of suspensions (for 6-10 suspensions, n=13, 14.3%) while this number for Group DPP was 3 (2.6%). In addition, the number of suspensions and their percentage in each group is included in Table 12.

Table 12

Comparison of the Number of Suspensions by Participants and the Group Means

Groups	DPP			COP	
N	Mean	SD	N	Mean	SD
114	1.46	0.81	84	1.84	1.22
Number of Suspensions	DPP n	%		COP n	%
None	71	62.3		45	53.6
1-5	38	33.3		21	25.0
6-10	3	2.6		13	15.5
11-15	0	0.0		1	1.2
15-20	0	0.0		0	0.0
21+	2	1.8		4	4.7
Total	114	100		84	100

Written Language Proficiency of the Participants' Enrolled in Alternative Education programs as measured by TOWL-3

The mean values of written language scores of the participants in both group DPP and COP were calculated and found to be very similar. The mean value for group DPP was 57.4 with standard deviation being 17.3 (N=114), while the mean for group COP was 56.0 with a 16.9 standard deviation (N=83). Table 13 shows both means and standard deviations for groups DPP and COP.

Table 13

Mean Values of Written Language Performance of Students Enrolled in Alternative Education programs as Measured using TOWL-3

Group	N	Mean	SD
DPP	114	57.4	17.3
COP	83	56.0	16.9

Note. In group COP, only 83 TOWL-3 scores were available for analysis.

Although there was no significant difference between the groups DPP and COP on TOWL-3 scores (t= -.55, p= .67), when the standard scores are converted into percentile rank the following data were found to be valuable in comparing DPP and COP participants' written language performance on reported TOWL-3 norms. Table 14 shows the participants' percentile rank. In both groups, a substantial number of the participants' written language performance was below 25th percentile rank (for DPP, n= 82, 71.93% and for COP, n= 67, 79.7%).

Table 14

Percentile Rank of Participants Enrolled in Alternative Education Programs on TOWL-3

Percentile Rank	DPP n	DPP %	COP n	COP %
<1-25	82	71.9	67	79.7
26-50	22	19.3	10	12.0
51-75	8	7.0	6	7.1
76-100	2	1.8	1	1.2
Total	114	100	84	100

STAR Reading and Math Performance of Participants Enrolled in Alternative Education Programs

Table 15 shows both math and reading mean scores for groups DPP and COP. For group DPP, the mean score for reading found to be 699 (N=48, SD =252.2) while it was 675 for group COP with a standard deviation of 353.0 (N=42). The score range for the Group DPP was 263 to 1311. This range for Group COP found to be 119 to 1328.

For group DPP, the math mean score was 737 with a standard deviation of 108.0 (N=45) and the mean for group COP was 718 with a standard deviation of 122.5 (N=40). The range of math scores was 454 to 937 in Group DPP, and 393 to 1023 in Group COP.

Table 15

Comparison of Means for Participants' STAR Reading and Math Scores

Group		DPP			COP	
STAR	n	Mean	SD	n	Mean	SD
Reading	48	699.7	252.2	42	675.4	353.0
Math	45	737.2	252.2	40	718.3	122.5

Question One

The first question of this study was investigating how the participants in groups DPP and COP differ on selected personal, academic, and demographic variables. To address this question, the following information is presented including sub- questions:

1A. This question was set to investigate whether a significant difference exist between participants who are identified under the DPP category and those who were in the COP category on measures of (a) written language skills as measured by TOWL-3 and (b) academic achievement as measured by STAR math and reading scores?

(a)The t-test statistical procedure was used to compare group DPP and COP on written language skills which were measured on interval scale of measurement. This analysis revealed no significant difference between the mean levels of written language scores in the groups (DPP and COP) ($t = -.55$, $p > .05$). Table 16 shows the means and standard deviation which were very close in values for both groups.

Table 16

Comparison of TOWL-3 Mean Values of Participants Enrolled in Alternative Education Programs

Groups	N	Mean	SD	t	SE	p
DPP	114	57.42	17.26	-.55	1.61	0.67
COP	83	56.06	16.85		1.85	

(b) In comparing groups DPP and COP on academic achievement measures, math and reading scores, a t- test analysis was completed. The results for both reading and math were not significant at alpha 0.05 level. From this analysis, it can be concluded that the groups DPP and COP do not differ on academic achievement measures. Table 17 shows mean values, standard deviation, t and p values for both groups.

Table 17

Comparison of the Means on Selected Academic Achievement Measures of Students Enrolled in Alternative Education Programs

Groups	Academic Achievement Measures									
	Reading					Math				
	N	Mean	t	df	p	N	Mean	t	df	p
DPP	48	690	1.66	73	0.49	45	721	1.66	83	0.46
COP	42	692				40	718			

1B. In order to address the question of whether there was a relationship between written language skills and school sanctions for problem behavior for participants in groups DPP and COP, a correlation analysis was utilized. School sanctions were defined as student referral to whether the participants were referred to ACCESS because of truancy reason and/or number of suspensions.

When examining the relationships between the variables of written language scores and truancy a t-test and between written language scores and number of suspensions, the Pearson Product Moment correlation coefficient (Gall, Borg, & Gall, 1996) were used. For interpretation of correlation coefficients, Davis's proposed set of descriptors was used (Davis, 1971). The coefficients and their descriptors are as follows:

Coefficient	Description
.70 to higher	Very strong association
.50 to .69	Substantial association
.30 to .49	Moderate association
.10 to .29	Low association
.01 to .09	Negligible association

Results of these correlations indicated no significant relationship between the variable written language and suspension. Therefore, number of suspensions was not found to be significantly related to participants' written language skills. Computed coefficients between TOWL-3 and number of suspensions for each group is presented in Table 18.

Table 18

Relationships between Written Language Skills and the Number of the Suspensions among Students Enrolled in Alternative Education Programs

Group	N	r	p
DPP	114	-0.147	.118
COP	83	-0.083	.457

Note. There were only 83 TOWL-3scores available for participants in group COP for analysis.

In order to investigate whether or not a relationship exists between TOWL-3 scores and truancy (being truant or non-truant), a 2-tail independent t-test was utilized. The results indicated no significant difference between being truant and non-truant on TOWL-3 variable (see Table 19).

Table 19

Relationships between Written Language Skills and Truancy among Students Enrolled in Alternative Education Programs

Group	N	t	p
DPP	114	0.849	0.398
COP	83	-0.354	0.724

Note. There were only 83 TOWL-3 scores available for participants in group COP for analysis

1C. In this part of the first question, the purpose was to investigate whether or not relationships exist between school sanctions for problem behavior and academic

achievement as measured by STAR reading and math scores. For the purpose of this study, truancy and number of suspensions were included in the analysis.

In order to investigate whether or not differences exist in being truant or not-truant and STAR academic achievement measures, a 2-tail independent t-test was utilized. The results indicated no significant difference between being truant and non-truant on either of the academic achievement measures. Table 20 includes t and p values of the analysis.

Table 20

Comparisons of the Means on STAR Academic Achievement Measures and Truancy among Participants Enrolled in Alternative Education Programs

	Academic Achievement Measures					
	Reading			Math		
Group	N	t	p	N	t	p
DPP	48	-0.06	0.95	45	-0.47	0.64
COP	42	-0.96	0.34	40	-0.13	0.90

The possibility of a relationship between number of suspensions and STAR reading and math measures was investigated utilizing the Pearson Product Moment correlation coefficient. The interpretation of the results, based on Davis's (1971) descriptors, indicated a moderate association between the number of suspensions and math academic measures for participants in group DPP. Table 21 shows the r and p values for the variables.

Table 21

Relationships between Number of Suspensions and Selected Academic Measures for Participants Enrolled in Alternative Education Programs

		Academic Achievement Measures				
		Reading			Math	
Groups	N	r	p	N	r	p
DPP	48	-.163	.268	45	.463*	.002
COP	42	.051	.751	40	.122	.458
Total	90			85		

Note. * Correlation is significant at the 0.01 level (2-tailed)

1D. In this question, the investigation of whether or not a relationship exists between written language skills as measured by TOWL-3 and academic achievement as measured by STAR reading and math scores in both groups was conducted utilizing the Pearson Product Moment correlation coefficient. The results are presented in Table 22 for both groups.

Table 22

Relationships between Written Language Skills and Selected Academic Achievement Measures among Students Enrolled in Alternative Education Programs

		Academic Achievement Measures				
		Reading			Math	
Group	N	r	p	N	r	p
DPP	48	.30*	.042	45	.40**	.006
COP	42	.29	.068	40	.15	.355

(table continues)

Total	90	85

Note. *Correlation is significant at the 0.01 level (2-tailed)
** Correlation is significant at the 0.05 level (2-tailed)

The interpretation of the results using Davis's descriptors points out a moderate association between both the written language skills and academic measures for the participants in group DPP. The association between reading and written language skills was significant at 0.01 level, while the association between math and written language found to be significant at 0.05 level. Therefore, this moderate association can be interpreted as an indicator of a positive relationship between reading and written language skills as well as math skills for participants in group DPP.

Question Two

In this question, whether or not relationships exist between behavioral characteristics as measured by number of suspensions, written language skills as measured by TOWL-3, STAR academic measures and selected demographic characteristics (gender, ethnicity, English language designation and being classified under either DPP or COP).For that purpose, multiple regression analysis with TOWL-3 scores, reading and math being dependent variables in three different analysis was utilized. The other variables were treated as independent variables which were gender, ethnicity, English language designation and the group (DPP or COP) for all the three constructed models. Stepwise entry of the variables was used because of the exploratory nature of the study. Stepwise procedures are defined as "a set of rules for deriving regression equation by adding and subtracting one variable at a time from the regression

equation (p.203)" (Howell, 1995). In this regression equation variables were included that significantly increased the explained variance (Howell, 1995).

In analyzing the data, four variables were constructed from the data collected. The first of these four variables was gender. For the variable gender two "yes or no" variables were constructed. This variable was coded as "1" for female and coded as "0" non – females. Same coding was used for males. Dummy coding also was used for the variable, gender, ethnicity, with four "yes or no" variables being constructed. The variables created were coded as whether the participants were Hispanic, whether they were non-Hispanic White, whether they were Vietnamese and whether they were African American. For each response, if the participants indicated yes, this was coded as "1", while no responses were coded as "0". For the third variable constructed, English language designation, "dummy coding" was used to construct three "yes or no" variables. There were three possible designations for English language proficiency. These were: English only (EO), Limited English proficiency (LEP), and Identified Fluent English proficient (IFEP). Variables created were whether participants were EO, whether they were LEP and whether they were IFEP. In each instance, yes was coded as "1" and no was coded as "0.".

The fourth and the final variable constructed was the participant was identified under, either group DPP or group COP. The same dummy coding was used in constructing two variables. These variables were whether participants were in group DPP, and whether participants were in group COP. Each yes response was coded as "1" and no response was coded as "0".

Table 23 presents the results for the stepwise multiple regression analysis for written language skills (TOWL-3) as a dependent variable. From English language designation "English Only (EO)" was found to be significant. The nature of this influence was such that individuals who were designated as "EO" tended to have higher scores on the written language measure, TOWL-3. Consider alone, this variable explained a total of 4.7 percent of the variance in written language performance as measured by TOWL-3.

Table 23

Multiple Regression Analysis of Participants' Written Language Skills

Source of Variation	df	MS	F-ratio	p
Regression	1	2692.8	9.654	.002
Residual	195	278.9		
Total	196			

Variables in the Equation

Variables	Standardized Coefficients B	t	Sig.	R^2
		34.32		
EO	.217	3.107	.002	.047

Variables not in Equation

(table continues)

Variables	t	Sig.t
Gender/Male[1]	-.690	.491
Ethnicity/NHW[2]	1.817	.071
Ethnicity/V[3]	.480	.632
Ethnicity/AA[4]	1.434	.153
Language Designation/IFEP[5]	-.231	.817
Group COP[6]	.880	.380

Note. Predictors in the model: (Constant), EO=English Only, Dependent variable: TOWL-3
[1]Gender, being male
[2]Ethnicity, being non-Hispanic White
[3]Ehnicity, being Vietnamese
[4]Ethnicity, being African American
[5]Language Designation, being identified as Fluent English Proficient
[6]Being identified and served under group COP

The following analysis also was completed in order to determine if a model existed which explains a significant portion of the variance in Math academic performance of the participants in this study. Table 24 presents the results of the stepwise multiple regression analysis for math academic achievement measure as a dependent variable. The results indicated that from the entered variables gender (male), group (COP) and the ethnicity (non-Hispanic White) were found to be significant. Therefore, the results can be interpreted as the nature of this influence such that males, participants in group COP and those who are non-Hispanic Whites tend to score higher on math academic measure. Gender, group and ethnicity explained 18.5 percent of the variance in math achievement measure (see Table 24).

Table 24

Multiple Regression Analysis of Participants' Math Academic Achievement Measure

Model	Source of Variation	df	Ms	F-ratio	p
	Regression	3	219937	6.294	.001
	Residual	83			
Total		86			

Note. Dependent variable: Math
Predictors: (Constant), Non-Hispanic White, Group COP and male

Variables in the Equation

Model	Variables	Standardized Coefficients B	t	Sig.	R^2
			13.67		
	N-H. White	.282	2.83	.006	
	Grp. COP	-.313	-3.01	.003	
	Male[1]	.260	48.55	.015	.185

Variables not in the Equation

Model	Variables	t	Sig.t
	Ethnicity/V[2]	- .11	.912
	Ethnicity/AA[3]	.85	.397
	Language Designation/ EO[4]	.90	.373
	Language Designation/ IFEP[5]	-1.38	.172

Note. Dependent variable: Math
[1]Gender, being male
[2]Ethnicity, being Vietnamese
[3]Ethnicity, being African American
[4]Language Designation, being identified as English Only
[5]Language Designation, being Identified as Fluent English Proficient
[6]Being identified and served under group COP

Table 25 presents the results for the multiple regression analysis for reading as a dependent variable. Only ethnicity was found to be significant and all other variables were not significant, therefore were excluded from the model. The result indicated that Non-Hispanic White participants tend to score higher on reading achievement measure. This variable alone explained a total of 14.7 percent of the variance in reading academic measures (see Table 25).

Table 25

Multiple Regression Analysis of Participants' Reading Academic Achievement Measure

Source of Variation	df	Ms	F-ratio	p
Regression	1	907823.4	14.83`	<.001
Residual	86	61193.6		<001
Total	87			

Variables in the Equation

Variables	Standardized Coefficients B	t	Sig.	R^2
Constant		19.30	<.001	
Ethnicity/N-HW	.384	3.85	<.001	.147

Variables not in the Equation

(table continues)

Variables	t	Sig.t
Group[1]	1.67	.098
Gender/Male[2]	1.39	.166
Ethnicity/V[3]	1.67	.0.98
Ethnicity/AA[4]	.14	.884
Language Designation/EO[5]	-.44	.664
Language Designation/IFEP[6]	-.36	.722

Note. Predictors in the model: (Constant), Non-Hispanic White, Dependent variable: Reading
[1]Group identified and served under
[2]Gender, being male
[3]Ehnicity, being Vietnamese
[4]Ethnicity, being African American
[5]Language Designation, being Identified as English Only
[6] Language Designation, being Identified as Fluent English Proficient

CHAPTER 5

DISCUSSION

The primary purpose of this study was to investigate the written language skills of middle and high school participants who were attending an alternative program during the 2003-04 school year. In addition, the study sought possible relationships among written language skills, academic achievement and demographic characteristics.

The following specific questions guided the study:

Research Questions

In order to address the research problem, the following questions guided the study:

1 How do participants in groups DPP and COP differ on selected personal, academic, and demographic variables?

1A. Is there a significant difference between participants who are identified under the DPP category and those who were in the COP category on measures of written language skills as measured by TOWL -3 and academic achievement as measured by STAR math and reading scores?

1B. Are there significant relationships between written language skills and school sanctions for problem behavior for participants in group DPP and group COP?

1C. Is there a relationship between school sanctions for problem behavior and academic achievement of participants in group DPP and group COP?

1D. Is there a relationship between written language skills as measured by TOWL-3 and academic achievement as measured by STAR reading and math scores of the participants in both groups?

2. Do relationships exist between behavioral characteristics as measured by number of suspensions, written language abilities as measured by TOWL-3, academic achievements measured by STAR math and reading scores and selected demographic characteristics (gender, ethnicity, language competency in English and being classified under group DPP or COP)?

Limitations

In the initial proposal for this study, SES level was included as one of the demographic variables to be investigated in relation to written language skills of participants. However, neither the database nor the student cumulative folders included any direct information that could be used reliably as an indicator of SES level. Self reported information on whether or not the participants' parents received any state financial aid as food stamps or cash assistance, and/or had state health insurance was available. However, the validity of the self reported information was not believed to be a strong and direct indicator for SES and was not included in the analysis.

Summary of Results and Interpretation

The following is a summary of the major results of this study: The first major finding in this study related to the personal and academic demographic characteristics of the participants. These results are summarized as follows: The majority of the participants in the study were males in both group DPP (n=76, 66.67%) and group COP (n=75, 89.29%). Average age for participants in group DPP was 15; 5, while this number for participants in group COP was 15; 8

years. In addition, in both groups, the majority of the participants were high school participants. The number of high school participants in group DPP was 79 (69.3%) and in group COP was 6 (73.8%).

The enrollment history of the participants to ACCESS programs also varied greatly. While the majority of the participants in group DPP were new to the program (n=91, 79.0%), this number is decreased to 45 (53.6%) in group COP. The number of re-enrolled (2 or more times) participants was significantly higher in group COP (n=39, 46.4%) compared to those in group DPP (n=24, 21.0%).

The referral reason for each group differed based on the severity of the violation. For group DPP, the major referral reason was truancy (n=79, 69.3%). Expulsion and disruptive behaviors were some other major referral reasons. Forth (47.6%) of the COP participants did not have any other referral reasons but indicated to be on probation (P).

The ethnic distribution of participants revealed a very high number of Hispanic participants in both groups DPP (n= 56, 49.1%) and in group COP (n=34, 40.5%). This distribution is very similar to the one reported by both Orange County Department of Education (OCDE) and Orange county.

As it might be related to the ethnic distribution of the participants, English language proficiency was found to be an important variable to study. In group DPP the number of the participants with Limited English Proficiency was 24 (21.1%) which was as twice as high in group COP (n=50, 59.5%). The findings related to number of suspensions illustrate a pattern in which the number of participants who had 1-5 suspensions was in group DPP (n=38, 33.3%) and

in group COP was 21 (25.0%). The number of participants with higher numbers of suspensions found to be gradually increasing in group COP.

The second major finding in this study was related to participants' performance on both written language and academic measures: The statistical analysis revealed no significant difference between the mean levels of written language scores in groups DPP and COP ($t=-.55$, $p>.05$). When further investigated, in both groups participants' TOWL-3 performance was below the 25th percentile rank. In group DPP, 82 (71.9%) participants' and in group COP 67 (79.7%) participants' performances were below 25th percentile rank.

When groups' means are compared on math and reading academic measures, no significant difference was found. The results were not significant at alpha 0.05 level. It can be concluded that groups DPP and COP do not differ on written language, math or reading measures. Number of suspensions and participants' written language skills were found not to be significantly related (DPP, $r=-0.14$, COP, $r=-0.08$). In addition, the t- test results indicated no significant difference between being truant or non-truant on participants' written language performance in either group DPP ($t=0.84$, $p>0.05$) or group COP ($t=-0.35$, $p>0.05$).

Similar to the findings related to written language and truancy, the t-test results indicated no difference between being truant and non-truant on either of the academic measures (reading and math) at 0.05 alpha level. On the other hand, a correlation analysis results revealed a moderate association (Davis, 1971) between the number of suspensions and math academic measures for participants in group DPP. The r value was calculated to be .46.

When possible relationships investigated between participants' written language and academic achievement performance, the results indicated a moderate association (Davis, 1971)

between both the written language and reading skills (r=.30) which was significant at 0.01 level, and written language skills and math performance (r=.40) at 0.05 level for participants in group DPP. In addition, a low to moderate association (Davis, 1971) between the written language and reading skills was found for participants in group COP. These associations between written language and reading indicate a consistent association between two forms of language which has been stated in the literature previously.

The following findings summarized the results of the multiple regression analysis that was utilized. The results for the written language performance as a dependent variable indicated the English language designation to be a significant variable in explaining the 4.7 percent of the variation alone in TOWL-3 scores. More specifically, the EO participants performed better than LEP on the written language measure (TOWL-3).

When math academic achievement measure was included in the analysis as a dependent variable, the results indicated that males performed better than females, participants in 601 better than those in 602, and non-Hispanic White participants did better than Hispanic participants on math academic measures. This can be interpreted as a clear indicator of gender, group and ethnicity being significant variables in explaining the variance in math scores. All together, these three variables explained 18.5 percent of the variance in math.

For reading as a dependent variable, ethnicity was found to be the only significant variable in explaining the 14.7 percent of the variation alone in reading scores. The results indicated that non-Hispanic White participants performed better than participants from other ethnicity groups in reading.

Conclusions, Implications and Recommendations

Based on the results of this study, the following conclusions, implications and recommendations were composed: Youth in alternative settings can be described as youth at-risk for behavioral disorders who are mainly males (in DPP, n=76, 66.7%; in COP, n= 75, 89.3%), a large number of them Hispanic (in group DPP, n= 56, 49.1% and in group COP, n=34, 40.5%) and who are most likely to be English Language Learners (in group DPP, n=24, 21.1% and in group COP, n=50, 59.5%). Although they are not identified as having BD, they are under either Delinquency Prevention Program or Court Ordered Probation because of serious violation of district or state discipline codes. This conclusion is based on the descriptive results of this study which were reported above. As it was reported by ACCESS , Orange County Department f Education (OCDE) (2004), the number of students from culturally diverse backgrounds is increasing and currently it is near a half million in Orange County. They further indicated that in 2001, the increase of the Hispanics (0-17 years old) was significant. This description of the students in alternative programs supported the student profile that was reported by OCDE (2004).

Schubert and Gates (1990) estimated that one in four adolescents, about seven million youth are seriously at-risk of not making successful transition from youth to adulthood and another seven million may be at moderate risk. In this study, the participants in group COP are those indicated to be seriously at-risk, while participants in group DPP believed to be at a moderate risk.

The ethnic minority participants and those who are LEP were found to be the major concern group in relation to the behavioral violations and their current situation under the court

probation. The ethnical distribution of the participants in both groups supports this conclusion. Hechinger (1992) stated that minority groups are reported to be facing different realities and negative school experience at higher degrees. These experiences are characterized by a number of suspensions, truancy, poor relationships with adults, low academic achievement, low motivation and low expectations. Because of the high number of suspensions and truancy, they miss out on learning opportunities and instruction (Slavin & Madden, 1989).

Youth at-risk who were the interest group in this study, demonstrated very complex behavioral and academic characteristics which might be the result of interacting environmental and developmental/disability related factors. On a daily basis, these youth were exposed to and experienced the consequences of environmental factors that influence their choices and shape their behaviors. These factors can be summarized as poverty, lack of opportunities and choices, lack of supervision and social support.

In addition to environment factors, developmental/ disability related internal factors also impede their performances because necessary services are not provided. Among the participants of this study (N=198), only 5 participants reported using medication for ADD/HD and/or OCD. Attention Deficit Hyperactivity Disorder and other mental disorders put children at risk for both academic and behavioral disorders if necessary services are not provided. Youth at-risk who attend alternative settings might be under diagnosed with ADD/HD, OCD, ODD, depression, and other mental disorders (August & Garfinkel, 1989). Studies done with adolescents with EBD have found that 38% to 75% of them were identified as having a learning disability (Miniutti, 1991; Griffith et a., 1997)

Youth who are enrolled in alternative programs are more likely to be re-enrolled in these programs following a more serious violation of either district or state discipline code. This conclusion was based on the fact that the number of re-enrolled participants in group COP was higher (n=39, 46.4%) than group DPP (n=24, 21.0%) which should be an alerting fact that more effective strategies must be implemented when students are new to the program. The participants in DPP as new participants are more likely to re-enroll under formal probation as COP students. This conclusion is supported by the re-enrollment findings of OCDE (2004).

This rate of re-enrollment can be explained by various factors. With the age both severity and the frequency of the violations are increasing. Studies reported that behavioral disorders increase with the student's age and the severity of concomitant LD (Del'Homme et al., 1996; Forness et al., 1996) Although, the participants in this study were not diagnosed as having a disability, they presented most of the characteristics of BD, LD and ADHD. Students who are identified as LEP are disadvantaged just like participants with LD when necessary services are not provided.

School related factors play an important role in re-enrollment of the students to alternative programs. In alternative settings, students are in a more relaxed setting with their peers who share common characteristics with them; they get more attention, and work at their own pace. When these participants return to their districts there are no changes made to either accommodate or modify both instructional and disciplinary practices. Kamps et al., (1999) indicated the followings to be some of the school characteristics of participants who are at-risk: poor teacher student interaction, peer pressure, teacher attitude and lower expectations, and curricular variables which are one of the major barriers for participants, who are English

language learners. In addition, existing intervention practices are more negative than proactive or constructive; suspension and expulsions, retention, and pull-out programs. This process of re-enrollment is the deferral of facing the reality that this group of youth in one form or another will remain to be part of the community and effective intervention programs are needed to reach them as early as possible.

Youth at-risk have inferior written language skills; they perform far below the norms on written language measures. This conclusion is based on the following findings: Despite the fact that there were no significant differences between both groups on TOWL-3 means, a significant number of participants in both group DPP (n=82, 71.9%) and COP (N=67, 79.7%) showed written language performance that was far below the 25th percentile rank on TOWL-3 norms.

Youth who have been suspended multiple times have found to have lower math skills. This association between the number of the suspension and math skills for participants in group DPP is described as moderate association (Davis, 1971). Higher the numbers of the suspensions, lower the math scores are. This association can be explained by the missing opportunities to learn when the students are suspended and out of school.

EO participants tend to get higher scores on written language measure. The English language designation was found to be a significant variable in explaining the variance in written language skills. This finding is supportive of the previous research (Brice, 2002; MacArthur, 1993; Pallas et al., 1989) indicating the academic difficulties students with LEP experience due to low proficiency in English language which puts them at-risk for academic failure.

Males, participants in group DPP and non-Hispanic participants tend to score higher on math academic achievement measures in group DPP. This finding supports the other findings of this study in relation to group and ethnicity being important factors in explaining participants' performance.

Non-Hispanic White participants tend to get higher scores on reading measures which also strengthens the discussion of the ethnicity and language factor that needs to be investigated further and calls for immediate effective intervention.

The overall results of this study supported the findings of OCDE (2000), ACCESS Report that indicated the student achievement for community school students for Spring, 2003 to be as follows: The 77% of the community school students scored below basic in English Language Arts, 84% scored below basic math and 78% scored below basic in history as measured by California Standards Test (CST) (p.18).

Snow (1983) indicated the importance of language and literacy as follows: Students 'spoken language underlies and interacts with reading failure that may persist into adulthood. Language provides the main method of establishing and maintaining social relationships and learning. Reading by the end of the 3rd grade is the most fundamental skill of learning (1983). Limited English proficiency means low reading skills and as a result poor writing skills that might result in low-self-esteem, lower expectations from self, low self confidence and in some cases disruptive behaviors because of not being able to follow the instruction and function in class where there are high language expectations. Low reading skills also may result in drop-out, unemployment because of the lack of academic skills, no job training, depending on welfare and ending up in jail (Barr & Parrett, 2001).

The researcher recommended teacher training in differentiated instruction, and in English language development and effective teaching strategies and assessment driven instruction. There are both federal and state funding that is specific to categorical programs and teacher training in categorical programs. In addition to teacher training, there are funding sources for the purpose of English language instruction of parents who do not speak English or limited in their English proficiency. Parents should be encouraged and necessary services and support should be provided to make it possible for them to attend these programs such as childcare, weekend and night classes.b

The researcher also recommended a mandatory usage of systematic English Language Development program, and monitoring these programs and progresses. The challenge in providing these necessary services to English Language Learners is monitoring the implementation of these programs and the progress of the students due to shortage of staff and budget cut at state level.

Contrary to the finding related to higher performance of males, ACCESS data reported for Spring 2003, a comparison of female and male students academic performance on CST, ELA and Math scores (math for only 8th and 9th graders). They reported that on ELA test 6.5% of all females scored advanced or proficient, while only 5.0 percent of the males scored advanced or proficient. When compared on math test, the 5.4 percent of the females scored advanced or proficient while 4.7 percent of the male students scored advanced or proficient.

However, the data reported for Hispanic students were relevant and supported the finding of this study: Only 2.7 percent of Hispanic students scored advanced or proficient on ELA and only 4.0 percent of them scored advanced or proficient in Math. Scores for Juvenile

Hall/ Court schools (OCDE, 2004) were also very consistent with these findings on an ethnicity and gender variable but overall performance was lower than the community school students' performance. The female students' lower performance on math might be because of the expected high performance on language, and lack of encouragement toward math.

In summary, the major recommendation of this study is to design, implement and monitor early intervention programs, inclusion of other social services and mental health professionals in order to provide the necessary services and support to youth at-risk to maintain healthy and safe environments. Important points of recommendations are discussed below:

Misidentification, under identification or drop-out during the identification and intervention process are some of the concerns related to youth at risk. Epstein (1985) reported that behavioral problems failed to differentiate students with LD from students with EBD at senior high school level. It is more likely and less costly to keep students in school, motivate them and cooperate with parents and teaching them how to help their children and build the necessary language and academic background knowledge at earlier ages. Only 17 percent of the children are identified as SED by age 9 and less than 50 percent of these children have been identified by the age of 12 (Del'Homme et al., 1996). When they are not identified at early ages, they may miss out from regular school activities, opportunities for social interaction and communication which they may not have the tools for otherwise. Studies done with adolescents with EBD have found that 38 percent of them were identified as having a learning disability. In summary, a series of research reported that studies done with delinquent youth and those with mental health programs further indicated presence of LD in children with both conduct and emotional disturbance.

In relation to Hispanic students and coexisting disabilities, Harry (1974) and Westat (1988) reported that Hispanics are slightly less likely than non-Hispanic students to have a co-occurring disability (29% compared to 32%). This might be an indication of misidentification or under representation of Hispanic students in programs such as Speech and Language Disorders and counseling.

Lack of inclusive data makes research and withdrawing conclusions from research difficult. There is a great need for descriptive information on English Language Development programs and their implementations follow up studies in both the areas of youth at-risk in both schools and alternative settings in order to plan, adjust existing intervention practices and prevent the development of BD.

In this study, the timeline that the STAR test was taken by the participants varied from a day to a year old. It is recommended that this study is replicated in regular school districts where state achievement test results are available or when these state achievement test results available and reinvestigate the achievement component of this study. Further investigations of written language skills are recommended in order to find out the specific writing skills and sub-sections of TOWL-3 that ELD students and overall ACCESS students had difficulty with.

Policy and implementation changes at district and site levels are recommended to meet the needs of students at-risk who may or may not qualify for special education services. The preventive strategies/programs and intervention programs need to be provided at students home schools in an inclusive environment thru increased counseling and psychological services, collaboration among speech and language pathologist and other professionals to implement

group language activities in general education settings. These activities may include social communicative skills, social skill instruction and problem solving thru various means of instruction. Implementation of a research based writing program such as Writers' Workshop or Write Obn, and teaching students to use the writing process systematically is highly recommended. It is necessary that on going assessment is conducted to monitor the growth and the effectiveness of such programs during a sufficient period of time.

In conclusion, issues related to language, achievement, and behavior are complex and merit continued research action. The growing diversity within United States' schools provides challenges and opportunities for research to increase our knowledge of these complexities. We must continue research to identify as early as possible meaningful differences in language abilities and to address these with validated instructional procedures.

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APPENDIX A
REQUEST FOR PERMISSION TO CONDUCT THE STUDY AT OCDE

December 20, 2003

Ted Price, Ph.D. Assistant Superintendent, Division of Alternative Education,

Orange County Department of Education

200 Kalmus Drive,
C.Mesa, CA 92628-9050

Dear Dr. Price,

I, Zuhar Rende- Degirmenci, am a special education teacher. I am pursuing a PhD degree in the Department of Curriculum and Instruction/Special education at Louisiana State University. In order to complete the requirements for this degree, I am conducting a study related to written language development and skills of middle and high school students in an alternative program. In addition, this study will investigate possible relationships between behavioral characteristics and selected demographic characteristics such as SES, ethnic background and gender. The College of Education at Louisiana State University has sanctioned this study since it will have substantive implications in the field of education. I am writing to you to request permission that will allow me to conduct my study in your county, Alternative Education Program. I believe the results of the study will be beneficial in planning future intervention programs and early identification of the students at risk for both Behavioral Disorders and academic failure.

I am planning to administer the Test of Written Language (TOWL-3) in which students will be asked to write about a topic which takes 15-20 minutes for only one session and respond to some questions related to language. During the study the students will not be required to do anything else or no other test will be given. There will not be anything that may harm the students in any way. The test will be administered at school at a convenient time for teachers so there will not be any obligations or inconvenient participation or traveling in students part. At any time, you may stop the testing. The anonymity of the students will be carefully protected, and at no time will specific information regarding students be accessible by anyone other than my major professor (Dr. Kenton Denny) and myself. Descriptive information will be collected and students' responses will be recorded on a checklist with no names on it.

If you have any questions please do not hesitate to call me. I can be reached at (562) 694 0360. My research is supervised by Dr. Kenton Denny at Louisiana State University. He can be reached at (225)578 2299. Thanks in advance for your cooperation.

Respectfully yours,

Zuhar Rende-Degirmenci

APPENDIX B
PERMISSION TO CONDUCT THE STUDY AT OCDE

To: Zuhar Degirmenci <zdegir1@lsu.edu>
cc: Judy_Allison@ocde.k12.ca.us, MaryLou_Vachet@access.k12.ca.us
Subject: Re: Zuhar Rende/permission letter
Zuhar,
Please accept this email as confirmation of your permission to conduct a study with students enrolled OCDE's Alternative Education Program. Ted Price, Assistant Superintendent

Zuhar Degirmenci <zdegir1@lsu.edu> 01/05/2004 12:35 AM	To: Ted_Price@ocde.k12.ca.us cc: Subject: Re: Zuhar Rende/permission letter

APPENDIX C
POSITIVE PARENT CONSENT FORMS

Dear Parents,

I, Zuhar Rende-Degirmenci, am a special education teacher. I am pursuing a PhD degree in the Department of Curriculum and Instruction/Special education at Louisiana State University. In order to complete the requirements for this degree, I am conducting a study related to written language development and skills of middle and high school students. The College of Education at Louisiana State University has sanctioned this study since it will have substantive implications.

The purpose of the study is to investigate the written language skills of middle school students. I am planning to administer the Test of Written Language (TOWL-3). In this test the students will be asked to write about a topic which takes 20 to 25 minutes for only one session and respond to some questions related to language. The test will be administered following enrollment as part of the regular assessment process.

There will not be anything that may harm your child in any way. At any time, you may withdraw your permission for your child to participate or stop the testing. The anonymity of your child will be carefully protected, and at no time will specific information regarding your child be accessible by anyone other than my major professor (Dr. Kenton Denny) and myself. Descriptive information will be collected and your child's responses will be recorded on a checklist with no names on it.

To be able to include your child in my study, I need your written permission. Please sign and date the permission form. If you have any questions please do not hesitate to call me. I can be reached at (562) 964- 0360. My research is supervised by Dr. Kenton Denny at Louisiana State University. He can be reached at (225)578 -2299. Thanks in advance for your cooperation.

Sincerely,

Zuhar Rende – Degirmenci

Permission for my child to be included in the Research Study:
Written Language Skills of Middle and High School Students

Student's Name*:* _____
School: ACCESS Region B
District: OCDE

Yes, I give permission for my child to be administered the Test of Written Language by Zuhar Rende-Degirmenci and assisting speech and language therapists.

Parent's name: _____

Parent's signature: _____ **Date**: ____/____/04

APPENDIX D
POSITIVE STUDENTS ACCENT FORM

Dear Students,

I, Zuhar Rende-Degirmenci, am a special education teacher. I am pursuing a PhD degree in the Department of Curriculum and Instruction/Special education at Louisiana State University. In order to complete the requirements for this degree, I am conducting a study related to written language development and skills of middle and high school students. The College of Education at Louisiana State University has sanctioned this study since it will have substantive implications.

The purpose of the study is to investigate the written language skills of middle and high school students. I am planning to administer the Test of Written Language (TOWL-3). In this test, you will be asked to write about a topic which takes 15 minutes for only one session and respond to some questions related to written language. The test will be administered following enrollment as part of the regular assessment process.

There will not be anything that may harm you in any way. At any time, you may withdraw your permission to participate or stop the testing. Your anonymity will be carefully protected, and at no time will specific information regarding your identity be accessible by anyone other than my major professor (Dr. Kenton Denny) and myself. Descriptive information will be collected and your responses will be recorded on a checklist with no names on it.

To be able to include you in my study, I need your written permission. Please sign and date the permission form. If you have any questions please do not hesitate to call me. I can be reached at (562) 964- 0360. My research is supervised by Dr. Kenton Denny at Louisiana State University. He can be reached at (225)578 -2299. Thanks in advance for your cooperation.

Sincerely,

Zuhar Rende – Degirmenci

Permission to be included in the Research Study:
Written Language Skills of Middle and High School Students

Student's Name*:* _____
School: ACCESS Region B
District: OCDE

Yes, I give permission to be included in the study and to be administered the Test of Written Language by Zuhar Rende- Degirmenci and assisting speech and language therapists. I acknowledge that I can withdraw my permission and stop the testing at any time.

Student's signature: _____ **Date**: ____/____/04

VITA

Zuhar Rende is an educational specialist. She earned a Bachelor of Science degree in psychological services in education and a Master of Science degree from Ankara University, Turkey, in 1987 and in 1993 respectively. She earned an education specialist degree from Louisiana State University in 1995. Prior to her doctoral study at Louisiana State University, she served as a clinic director and the director for a Rehabilitation Center for children with mental retardation in Turkey. During her studies in both communication sciences and disorders and curriculum and instruction, she assisted Dr. Jan Norris, in both preschool language and language learning after school program, in supervision of both undergrad and masters students for two years. Following her work as a graduate assistant, she has taught an autism class at E. Baton Rouge Parish School District. Since 2000, she has been serving as a self-contained Severe Disorders Language classroom teacher at El Rancho Unified School District, Pico Rivera, California. Her research interests are language disorders, behavioral disorders, autism, parent and teacher training and early intervention programs for youth at-risk.